

SEYCHELLES FISHING AUTHORITY



**STRATEGIC PLAN
2018 - 2020**



Seychelles Fishing Authority Strategic Plan 2018 – 2020

Volume 1 Goals and strategies

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Foreword

Effective management of fisheries is a must for our small country with limited natural resources. As a nation, our economic prosperity is intricately linked with the quality of our natural environment and the goods and services that it offers. From when these islands were first discovered, fisheries has played a major role in the lives of its people and have helped them to attain the highest Gross Domestic Product (GDP) per capita in Africa. Over the years, fisheries have acted as a catalyst for national development and have enabled other sectors such as ports and industries to expand.

From its creation in 1984, the Seychelles Fishing Authority (SFA) has been mandated as the executive arm of the Seychelles government for driving development in the fisheries sector and for managing the stocks on which fisheries depend. Now that most of the major fisheries are fully exploited or close to full exploitation, there are new focus on sustainable management of fisheries resources, getting more value from the fish that we are already catching and in creating opportunities to increase fisheries production through aquaculture.

Two important policy documents on fisheries were approved by Government in 2018: the Seychelles National Aquaculture Policy and the Management of By-Catch Policy. Under preparation is the new Fisheries Sector Development Plan and the Aquaculture Sector Development Plan. These new policies and plans draws a thicker line and creates the road map that Seychelles should follow in the development and management of its fisheries sector. At no other point since the industrial tuna fishery started has Seychelles taken such a step to strengthen its fisheries sector as it is doing today.

In order to get the maximum out of these new policies and plans, execution will be the key. To that effect, SFA has formulated this Strategic Plan for the year 2018 – 2020. The plan sets out the organization's long-term vision, mission, core principles and values as well as the strategies it will be employing and priority actions that will be implemented. These new strategies and priority actions should make major contributions in the way that SFA is able to deliver on its mandates and on government policies concerning the management and development of fisheries and aquaculture.

While SFA has not been at its best over the last couple of years and many challenges remains, an institutional analysis undertaken as part of the Strategic Plan formulation process indicates that most of these challenges come from within the organization and most can be overcome if we are able to improve planning, risk management, consultation, coordination, performance evaluation and build the capacity of our workforce to improve efficiency and their ability to tackle challenges and seize new opportunities.

This Strategic Plan lays the foundation for strengthening the SFA and to ensure that all of its actions implemented in a manner which promotes good governance, transparency, greater participation and accountability and according to internationally recognized best practices in fisheries management. To this end, this Strategic Plan focusses on SFA's effort for the next three years on four fundamental goals, which are to:

- (i) Put in place effective governance arrangements;
- (ii) Institutional strengthening of SFA;
- (iii) Ensure the sustainability of fisheries resources;
- (iv) Optimize the economic and social benefits of fisheries.

Many Seychellois and our foreign partners depend on us for the wide array of services that we offer in support of fisheries development from facilitating allocation of land for fisheries related projects to issuing of catch certificates so that our fisheries products can be exported all over the world. As our stakeholders we ask you to hold us accountable to the principles and values that we have committed ourselves to adopt as we implement this Strategic Plan. Point it out to us if we deviate from our path, come and talk to us if you want to contribute. We look forward to working with our wide stakeholder base to ensure that this plan is effectively implemented.



Nirmal Jivan Shah (PhD)
Chairman of the Board
Seychelles Fishing Authority



Ronny Renaud
Chief Executive Officer
Seychelles Fishing Authority

Glossary

Aquaculture: The rearing of aquatic animals or the cultivation of aquatic plants for food.

Artisanal fisheries: Subsistence or commercial fisheries, providing for local consumption or export.

Demersal fish: Fish found living on or near the bottom of the sea.

B_{MSY} : The biomass that enables a fish stock to deliver the maximum sustainable yield.

Capture fisheries: All kinds of harvesting of naturally occurring living resources in both marine and freshwater environments.

Distant Water Fishing Nations: Countries that operates fishing vessels within the 200 mile Exclusive Economic Zones (EEZs) of other countries, and less often further offshore, in what is known as the high seas.

Ecosystem-based management: An environmental management approach that recognizes the full array of interactions within an ecosystem, including humans, rather than considering single issues, species, or ecosystem services in isolation.

Fisheries: The occupation, industry, or season of catching or rearing fish or other sea animals.

F_{MSY} : The maximum rate of fishing mortality (the proportion of a fish stock caught and removed by fishing) resulting eventually, usually a very long time frame, in a population size that is able to deliver the maximum sustainable yield.

Governance: The way that organizations or countries are managed at the highest level, and the systems for doing this.

Limited entry fishery: Fishery where the number of operators or gears is restricted to control the amount of fishing effort; frequently involves controls on the number and size of vessels, and condition relating to the transfer of fishing rights or the replacement of vessels.

MSY: The maximum level at which a natural resource can be routinely exploited without long-term depletion.

Overfishing: The practice of commercial and non-commercial fishing which depletes a fishery by catching so many adult fish that not enough remain to breed and replenish the population. Overfishing exceeds the carrying capacity of a fishery.

Pelagic fish: Schooling fish not associated with the ocean bottom that migrate in coastal waters.

Policy: A definite course or method of action selected (by government, institution, group or individual) from among alternatives and in the light of given conditions to guide and, usually, to determine present and future decisions.

Reference point: An agreed point indicating long term *objectives* (or targets), for the management of a fishery, taking into consideration the *best possible catch* and ensuring the conservation of the stock.

Stock: Set of survivals of the cohorts of a fishery resource, at a certain instant or period of time.

1. Introduction

This Strategic Plan sets out the long-term vision, mission and adopted values of the Seychelles Fishing Authority (SFA). It provides the strategic priorities of the organization for the next 3 years. Its purpose is to ensure that SFA remains focus on its priorities and makes available the resources required for the achievement of its strategic goals. The SFA Strategic Plan should ideally be guided by the sector plans for fisheries and mariculture from the Ministry of Fisheries and Agriculture. However, in the absence of updated sector plans it builds on other national policy documents such as The Fisheries Policy of Seychelles (2005) and the National Food and Nutrition Security Policy (2013). It is aligned with other international and national instruments and strategies concerning fisheries and the management of Seychelles marine ecosystems such as the United Nations Sustainable Development Goal 14, FAO Code of Conduct for Responsible Fisheries, Vision 2032 for the Fisheries Sector, Seychelles Sustainable Development Strategy (2012- 2020), the Seychelles National Aquaculture Policy (2018) and the Seychelles National Agriculture Investment Plan (2015 – 2020).

This Strategic Plan directly address the causes for the sub-optimal performance of SFA as identified in the problem tree that was constructed as part of the organizational diagnostic analysis. It is intended to guide section heads and staff of the SFA in the development of their section plans, fisheries management plans and fisheries development plans. The Diagnostic Analysis Report can be found in Annex 1 and provides detailed description of current situation and assessment of SFA's performance over the last decade. The diagnostic analysis provides the justification for the strategies and priority actions which have been identified as part of this Strategic Plan.

In this document, the word fishery (fisheries in plural) encompasses both capture fisheries and aquaculture. Sometimes the word *fishery* (*fisheries*) and *aquaculture* are used together to emphasize the importance of aquaculture.

2. The Seychelles Fishing Authority

The Seychelles Fishing Authority (SFA) was created in August 1984 by the Seychelles Fishing Authority (Establishment) Act. This was at a time when the industrial tuna fishing sector started seeing intense development. At creation, the SFA's mission was to develop the fishing industry to its fullest potential and to safeguard the resource base for sustainable development. The organization employs more than 150 staff and a number of operational sections involved in: fisheries management, economic planning, research, mariculture development, fishing ports operation, value addition, infrastructure development, licensing, data and statistics, monitoring, control and surveillance and providing support to fishermen.

The functions of SFA as per Section 5 of the Establishment Act are:

- (a) to promote, organize and develop fishing, fishing industries and fishing resources in Seychelles;
- (b) to assist in the formulation of the national policy with respect to fishing, fishing industries and fishing resources and in the implementation of that policy;
- (c) to conduct negotiations, or engage in meetings, seminars or discussions, with regard to fishing or fisheries or the establishment or operation of fishing industries, whether at a national or international level, on behalf of the Republic or otherwise;
- (d) to identify the manpower training requirements of Seychelles with regard to fishing and fishing industries; and
- (e) those mentioned in any other written law.

Section 6 of the act list the powers of SFA and Section 7 details the functions of the Board of Directors.

The Chief Executive Officer and Board of Directors of SFA is appointed by the President for periods of two years. The SFA works in close collaboration with Ministry Natural Resources, Ministry of Environment and Energy, Seychelles Coast Guard, Seychelles Ports Authority, other Government institutions, fishermen and boat owners associations, local and international NGOs, universities, suppliers, development agencies and other partners. Stakeholder consultations are held on a regular basis regarding the development of the sector. The SFA gets its funding from Government through the annual budget and through the sector policy support funds of the EU/Seychelles Fisheries Protocols under the Fisheries Partnership Agreement.

3. Fisheries in Seychelles

The fisheries sector accounts for an estimated 90% of total annual export revenues for the Seychelles with more than SCR4 billions of fisheries product exported annually. Much of this revenue comes from the industrial tuna fisheries and canning. The artisanal fisheries is much smaller and total catch revenue is estimated at SCR169 million. The fisheries and related sector employs between 5 and 6,000 people, representing around 11 percent of total formal employment (OECD et al. 2013). Fish is an integral part of the Seychellois diet and culture with per capita consumption of around 65 kg per annum. The Seychelles National Food and Nutrition Security Policy recognizes that fisheries is one of the cornerstones of Seychelles' quest for food and nutrition security and Government has stated that it will strive to provide an enabling environment in which food production sectors can develop and grow sustainably.

Around 90% of total annual catches of purse seiners licensed to fish in Seychelles water are transshipped or landed in Victoria. Most of the vessels participating in this fishery are from Distant Water Fishing Nations

(DFWN) with some foreign owned but Seychelles flagged vessels. The purse seine fishery targets surface swimming tuna and accounts for around 93% of total catch, which consist primarily of yellowfin and skipjack. The long-line fishery makes up the remaining 7% of the catch and target deep swimming tuna, with the catch consisting mainly of Bigeye and to a lesser extend Yellowfin tuna.

The artisanal finfish fishery catches approximately 4,000 Mt tons of fish per year, with catch dominated by trevallies, jobfish and mackerels. The artisanal fishery is multi-gear and multispecies and targets demersal species such as groupers, snappers and emperors and coastal pelagics such as trevallies and mackerels. There is a small seasonal limited entry lobster fishery, which is focused principally around the main granitic islands. The sea cucumber fishery is also a seasonal and limited entry.

There is also a small amount of aquaculture production focused around the production of black pearl by pearl oyster (*Pinctada margaritifera*), for the jewelry trade, and hard corals for reef restoration purposes. It is expected that the aquaculture sector will become more prominent in the coming years now that the Seychelles National Aquaculture Policy has been approved and the Aquaculture Sector Development Plan is being finalized.

4. Status of Fishery Resources

The Yellowfin tuna (*Thunnus albacares*), one of the main species targeted by the industrial pelagic fishery, has recently been described as overfished and subject to overfishing in relation to the IOTC's B_{MSY} and F_{MSY} target reference points. The three other main targeted tuna species (Albacore (*Thunnus alalunga*), Bigeye tuna (*Thunnus obesus*), Skipjack tuna (*Katsuwonus pelamis*) are described as not overfished and not subject to overfishing. Caution is however advised in the management of these three species since average catch for the period of 2011-2015 has been close to MSY. Catch of Swordfish (*Xiphias gladius*) in 2015 was over MSY and should be returned to $< MSY$. Tab.1. summarizes the management advice that is recommended for each of the major stocks in the industrial fishery.

Species	Average catch (2011-15)	Stock status	Management advice
Skipjack (<i>Katsuwonus pelamis</i>)	394,320		No additional measures required
Yellowfin (<i>Thunnus albacares</i>)	390,185		Implement IOTC Resolution 17/01
Bigeye (<i>Thunnus obesus</i>)	101,515		No additional required if Catch $< MSY$
Albacore (<i>Thunnus alalunga</i>)	34,902		Cap total catch to MSY (~ 40,000 t)
Swordfish (<i>Xiphias gladius</i>)	31,900		Reduce catch to $< MSY$

Tab.1. Average catch, stock status and management advice for the main targeted species in the industrial fisheries

Catch for demersal fin fish has more or less plateaued at around 4,000 Mt per year since the early 1990s. A productivity-susceptibility analysis undertaken in 2014 found that most species targeted in the demersal fisheries were highly vulnerable (Fig. 1) due to high vulnerability to fishing gears (owing to multi-gear operations) and high coverage of the spatial distribution of fishing effort (diverse fleets accessing all areas of the Mahé plateau) (Fig. 2).

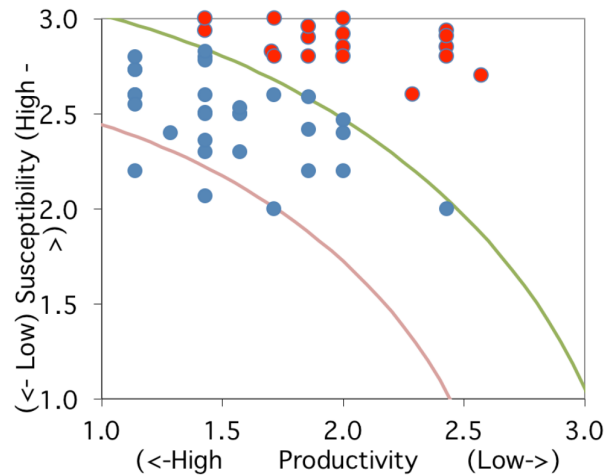


Fig.1. Productivity-susceptibility analysis (PSA) of 51 fisheries caught by the demersal fishery in Seychelles. Red dots represent those species categorized at high risk. Source: Gutierrez (2014).

In addition to high vulnerability, some species have low productivity therefore exacerbating their risk to overfishing. The Emperor red snapper (*Lutjanus sebae*) is the most sought after species in the plateau demersal fishery and is often used as an indicator of the general health of the fish stock on the Plateau. Concerns over the status of *L. sebae* stock were raised in 2004 when catches of this species began to increase dramatically. Prior to 2004, this species had been harvested at around the Maximum Sustainable Yield (MSY; 380 t) for over 10 years. By 2007 catch of this species had reached 1077 t per annum and had more than tripled MSY. This highlighted that there were major risks from continued targeting at those levels. From 2008 to 2012 a steady decline was observed in catches and a stock assessment undertaken in 2010 concluded that the exploitation rate were still above the rate to achieve MSY and the stock status of emperor red snapper was described as **overexploited**. Stock assessment undertaken in 2015 came up with the same result. The 2015 stock assessment exercise found catches of the eight other species for which data was available for stock assessment to be around MSY levels and in some cases exceeded such levels.

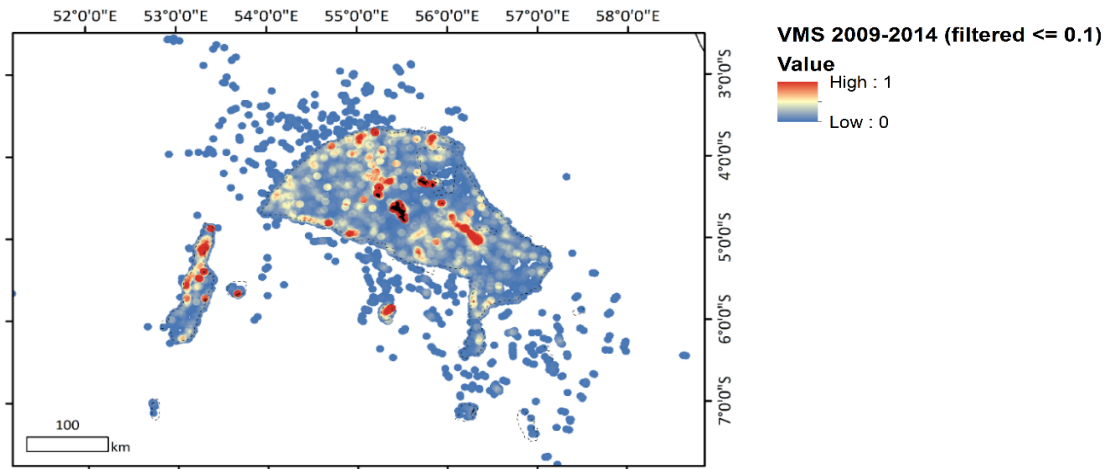


Fig.2. Map showing the distribution of fishing effort by the Seychelles artisanal whaler and schooner fleets constructed from VMS data for the year 2009 to 2014.

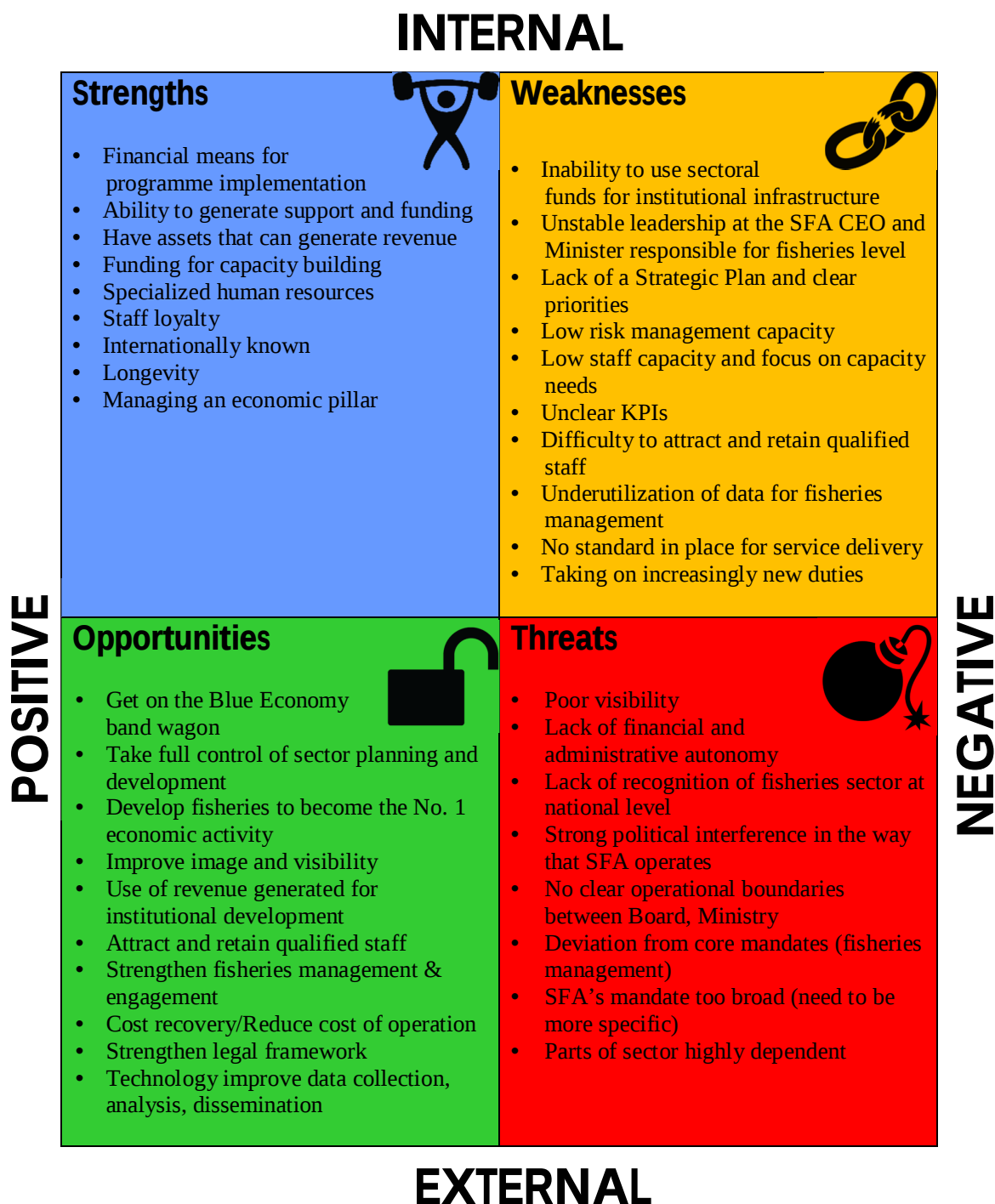
The sea cucumber fishery has been observing a decline in catch since catch peaked in 2011 with more than 600,000 individuals collected. The long-term decrease has been observed in all of the harvested species and it is believed that the stock is overfished. The lobster fishery is characterized by a boom and bust cycle with the fishery being kept open for several consecutive seasons followed by a period of closure to allow the stock to recover. Clear shifts have been observed in size composition of lobsters caught with a decrease in the proportion of larger lobsters caught observed in recent years. This has been attributed to high fishing pressure. There is a fishery for the spanner crab, *Ranina ranina*, but the fishery is seasonal and the stock is considered to be underexploited.

Aquaculture production is low with only one aquaculture farm in operation producing Black lipped oyster (*Pinctada margaritifera*) and Winged oyster (*Pteria penguin*) with annual production of about 8,000 pearls per year. Production of corals for reef restoration purposes has been substantial with more than 5,000 colonies grown-out annually.

5. Issues and opportunities in the operations of SFA

5.1 Strengths, Weaknesses, Opportunities and Threats

A SWOT analysis was done and is described in details as part of the Diagnostic Analysis Report. These are summarized below.



5.2 External issues

External issues that can affect the performance of SFA and implementation of this Strategic Plan falls in six different categories which are political, economic, social, technological, environmental and legal in nature. The main issues are identified and expected impacts highlighted. These issues are addressed through priority actions identified as part of each strategy.

	Issues - Unstable leadership with continued frequent changes of SFA's CEO and Minister responsible for Fisheries. - Change in Government during next presidential election. - Creation of separate authority and agency one doing fisheries management and the other fisheries development. - New international requirements in terms of reporting, control, surveillance, data collection, etc. - Increase lobbying and activism by the Seychellois, international public and fishing boat owners.	Expected impacts - Halting of progress being made in certain areas, demoralization of staff, loss of continuity and institutional knowledge. - Possible changes in fisheries policy and Minister for fisheries. - Need to share resources between new organizations and possibility for conflicts arising from different overall objectives. - Increase pressure on workforce with need to further increase number of staff and budget - Deviation from core duties, change in policy, negative perception of SFA.	Nature of impacts = Mixed
	Issues - Budget cut from Government to SFA. - Frameworks are established to increase cost recovery for services offered by SFA. - Additional resources are made available to recruit additional staff in key positions. - Government give SFA financial autonomy over its operations. - Reduction of funds allocation to SFA under the next Fisheries partnership agreement with EU.	Expected impacts - Reduced administrative efficiency of SFA. - SFA is able to collect more revenue from industry to fund its activities and support to the fisheries sector. - Improve service delivery and achievement of organizational goals and targets. - Institutional strengthening and ability to attract and retain qualified staff. - Reduction in the number of fisheries support and management initiatives funded by SFA.	Nature of impacts = Mixed
	Issues - Drug and social problems causing a reduction in the effective workforce - Restart of piracy in the Western Indian Ocean - Negative perception of SFA by members of the public due to a lack of information - Higher public expectation on service delivery by SFA - Attempt to manipulate SFA by fishers and other actors in the fisheries sector.	Expected impacts - Lack of human resources to fill necessary openings at SFA. - Shift in SFA focus from fisheries management to security. - Possible change in leadership to respond to public perception and reduced attractiveness of SFA. - Improved service delivery and justification for additional budget. - Possible loss of control of the sector and inadequate focus on sector priorities.	Nature of impacts = Mostly -

 Technological	Issues - Introduction of new technology for data collection, analysis and dissemination. - Integrated database and central repository for all SFA data. - Improvement of technology for fisheries research, stock assessment and prospecting.	Expected impacts - Improve efficiency in data capture, analysis, quality control and reduction in the cost of operation. - Facilitate access to information and decision making - Strengthen fisheries management and identification of new fisheries resources.	Nature of impacts = Mostly +
 Environmental	Issues - Climate change could lead to more abnormal environmental events and increase variability in species biology and stock sizes. - Natural disasters leading to damage of SFA and fisheries infrastructure and increase in operational risks. - Pressures from environmental groups to reduce environmental impacts of fisheries.	Expected impacts - Negative impact on the yield of fisheries resources and increase pressure on SFA to ensure resource sustainability. - Damage to SFA infrastructure and increase cost of operation. - Help SFA to strengthen fisheries management and improve transparency in decision making.	Nature of impacts = Mixed
 Legal	Issues - Fisheries Act (2014) not reviewed and updated to address various short falls identified through past reviews. - SFA Establishment Act (1984) not reviewed to redefine mandates and procedures for selection of Board of Directors - Others Acts and policies affecting fisheries sector not aligned to fisheries management objectives. - Increase in the number of judiciary cases resulting from implementation of new regulations - Increase in number of IUU incidents	Expected impacts - Difficulty in ensuring compliance to fisheries regulations, and difficulty in domesticating RFMO resolutions. - SFA overwhelmed by too much to do and a lack of strategic leadership from suboptimal identification of members on the Board of Directors. - Difficulty in ensuring appropriate fisheries management and resource sustainability. - Increase pressure on SFA's legal team loss of focus on priorities. - Increase pressure from Government, RFMOS and licensed operators to increase surveillance.	Nature of impacts = Mostly -

6. Strategic approach

6.1 Alignment to instruments and policies

The Strategic Plan of SFA is aligned to various international and national instruments and policies concerning fisheries and the management of Seychelles marine ecosystems. These instruments are:

(1) United Nations Sustainable Development Goal 14

The SDG goal 14 is to conserve and sustainably use the oceans, seas and marine resources for sustainable development. Many of its targets are related to the sustainable management of fisheries. This Strategic Plan will contribute towards the achievement of at least six of the 10 identified targets under this goal.

(2) FAO Code of Conduct for Responsible Fisheries

The FAO Code of Conduct for Responsible Fisheries sets out principles and international standards of behaviour for responsible practices with a view to ensuring the effective conservation, management and development of living aquatic resources, with due respect for the ecosystem and biodiversity. The Code recognizes the nutritional, economic, social, environmental and cultural importance of fisheries and the interests of all those concerned with the fishery sector. It also takes into account the biological characteristics of the resources and their environment and the interests of consumers and other users.

(3) Vision 2032 for the Fisheries Sector

The draft Vision 2032 for the Fisheries Sector is *“To develop fisheries to its full potential, making it the leading economic activity, whilst safeguarding the resource base for sustainability.”*

(4) The Fisheries Policy of Seychelles (2005)

The long-term policy of the Government of Seychelles for the fishing industry as defined under this policy is *“the promotion of sustainable and responsible fisheries development and optimisation of the benefits from this sector for the present and future generations.”*

(5) National Food and Nutrition Security Policy (2013)

The objectives of the National Food and Security Policy is to:

- (i) Ensure food security for all Seychellois through efficient and effective agricultural production, sustainable fisheries and balanced by importation of healthy and nutritious food;
- (ii) To improve and optimize the nutritional status, health and wellbeing of all Seychellois;

- (iii) Strengthen and align institutional resilience and capacity to effectively and appropriately respond to changes and shocks in food and nutrition security needs including an adequate and responsive knowledge and science base.

(6) Seychelles National Agriculture Investment Plan (2015 – 2020)

Programme 3 of the *Seychelles National Agriculture Investment Plan* (2005) deals with *Sustainable Fisheries Management and Aquaculture Development* and has the following six sub-programmes:

- (i) Artisanal Fisheries Promotion;
- (ii) Semi Industrial Fisheries Support;
- (iii) Industrial Fisheries Development;
- (iv) Develop fish products marketing and value chains and improve access to finance;
- (v) Development of Mariculture commodities and value chains, and;
- (vi) Post-harvest handling and seafood value addition.

This Strategic Plan is also directly linked with specific objective VII of the SNAIP which is for “*Institutions in the sector are strengthened and improved coordination allows the Ministry of Fisheries and Agriculture and its agencies/authorities to provide effective service delivery.*”

(7) Seychelles Sustainable Development Strategy (2012- 2020)

Section 6 of the Seychelles Sustainable Development Strategy (SSDS) deals with Fisheries and Marine Resources.

Goal 1 is to *manage demersal, semi-pelagic and pelagic resources in the Seychelles EEZ sustainably*. Its strategic objectives are to:

- (i) To develop and implement a wide range of policies which would ensure long-term sustainability of the fishing industry, such as long-term access to affordable finance, MCS, so as to reduce over-fishing and ensure stock sustainability.
- (ii) To implement integrated management plans based upon available scientific data for demersal and semi-pelagic resources.
- (iii) To implement an integrated management strategy for pelagic resources based upon available scientific data.

Goal 2 is to *develop a sustainable mariculture industry in Seychelles*. Its strategic objectives are to:

- (i) To assess the mariculture potential and its economic feasibility in the Seychelles EEZ taking into consideration the requirements of each specie to be farmed.
- (ii) To evaluate the impacts of various forms of mariculture activities and develop policies and guidelines to address those impacts.
- (iii) To develop opportunities for foreign investors and eventually Seychellois entrepreneurs to invest in mariculture activities.

(8) Seychelles National Aquaculture Policy (2018)

The overall goal of the Seychelles National Aquaculture Policy is:

To guide an effectively managed and environmentally responsible aquaculture industry that contributes towards food security and the creation of wealth in the Seychelles.

Its specific objectives are to:

- (i) Stimulate growth in a new industry.
- (ii) Promote good governance for the aquaculture sector which will enable the industry to develop to its full potential with a supportive regulatory framework.
- (iii) Seek environmentally responsible investors to develop the industry.
- (iv) Realise the market potential of the aquaculture sector.
- (v) Maximise the socio-economic contribution of aquaculture.
- (vi) Promote and provide an enabling platform for development of aquaculture at small, medium and large scales.
- (vii) Develop an enabling institutional environment that facilitates investment in aquaculture.
- (viii) Adopt, adapt and develop suitable and sustainable aquaculture technologies.
- (ix) Develop the necessary industry support services.
- (x) Implement an effective Human Resources capacity development programme for the future well-being of the sector.
- (xi) Improve public awareness of the benefits and potential of aquaculture for the country.
- (xii) Promote aquaculture as an important element of integrated coastal management.
- (xiii) Develop an aquaculture industry compatible with responsible stewardship of the coastal regions and their resources.

- (xiv) Establish aquaculture as a supplementary source of fish for domestic markets.
- (xv) Encourage future operators to co-manage the sector with the Regulator.

(9) Seychelles Management of By-Catch Policy (2018)

The objectives of the Management of By-Catch Policy are:

- (i) To ensure the protection of threatened species, species of concern and the sustainability of the stocks of by-catch species.
- (ii) To promote the sustainable optimal utilization of the by-catch of species that are not threatened, are not species of concern and whose stocks are sustainably managed.
- (iii) To promote greater onshore value-addition and marketing of by-catch for local consumption and export.
- (iv) To encourage local enterprises and increase economic benefit within the fisheries post-harvest and service sector.
- (v) To ensure high levels of food safety in the utilization of by-catch compliant to the phyto-sanitary and health regulations.
- (vi) To minimise the adverse impacts of fishing on the marine environment.

6.2 Our vision

The new vision for the SFA is: *Excellence in sustainable fisheries management and development*

6.3 Our mission

To ensure optimal utilization of the fisheries resources for the benefit of the Seychellois people through sustainable management, ecosystem-based approaches and integrated development.

6.4 Our core principles

To implement our mandates in a manner which promotes good governance, transparency, participation and accountability and according to internationally recognized best practices in fisheries management.

6.5 Our Values

1. **Integrity & professionalism:** Work with highest level of professional ethics, responsibility and respect to gain the trust of our constituents.
2. **Adaptability:** Be proactive and flexible in our approaches and make use of best available science and technology to execute our duties in line with the social and economic priorities.
3. **Inclusiveness and team work:** Promote team work, engage our co-workers and stakeholders and valorize the diversity of our workforce and stakeholders while working towards common results.
4. **Leadership:** Consistently leading the way by empowering and developing staff to own and drive work programs.
5. **Stewardship:** Promote sustainable resource management and ecosystem-based approaches among all stakeholders.
6. **Equity:** Be fair and provide equal opportunity to present and future generations.

6.6 Strategic goals

Four key strategic goals have been identified around which the strategic plan is structured. Each of the strategic goal builds on one of the four main components of fisheries management: (i) effective governance, (ii) the fishery management institution, (iii) the resource base and (iv) the economic and social benefits derived from fisheries. The strategic goals are:

Goal 1: Effective governance arrangements

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.

Goal 2: Institutional strengthening of SFA

Improve institutional infrastructure, build core competencies and strengthen the internal procedures of SFA to build and inspire human capacity for better service delivery.

Goal 3: Ensure the sustainability of fisheries resources

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 and global developments.

Goal 4: Optimize the economic and social benefits of fisheries

Ensure that the fisheries sector continues to play a key role in the sustainable development of the country and the socio-economic well-being of the Seychellois nation.

6.7 Strategies and Priority actions

Goals	Strategies	Priority actions	2018	2019	2020
Effective governance arrangements 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.	1.1 Strengthen organizational planning and strategic management to improve service delivery.	- Update and modernize the Seychelles Fishing Authority (Establishment) Act.			
		- Set up and operationalize a unit for project management.			
		- Develop a business plan for SFA that includes a business development and change management unit.			
		- Implement new organization structure for improved service delivery.			
		- Develop and implement a succession plan.			
		- Introduce Key Performance Indicators (KPIs) for all sections, programmes and staff.			
		- Prepare and implement a 3-year annual rolling plan for all sections.			
		- Design and introduce a simple more quantitative reporting systems.			
	1.2 Enhance the organization financial, administrative and risk management capability.	- Prepare and execute a plan for administrative and financial autonomy.			
		- Establish and operationalize a performance evaluation unit.			
		- Strengthen internal control, performance audit and risk management capacity across the whole organization.			
		- Establish clear standards for service delivery.			
		- Establish procedures for oversight by and reporting to the Board of Directors.			
		- Establish procedures for reporting to the Ministry of Fisheries and Agriculture and other oversight agencies.			
	1.3 Close gaps in the legal framework and ensure that legislation meets the requirement for effective control of fisheries and aquaculture value chain.	- Review and update the Fisheries Act (2014) taking into account new developments across the fisheries and aquaculture value chain.			
		- Revise and update the Fisheries Regulations (1991) in line with the new Fisheries Act.			

	1.4 Improve compliance to fisheries regulations.	- Strengthen the Compliance unit's human capacity (linked to Goal 2)		
		- Develop and implement new surveillance strategy and plan.		
		- Strengthen partnership with other enforcement agencies (local and regional) for exchange of surveillance information, joint sea/air patrols, decision making and capacity building.		
		- Develop and implement a public participation plan including incentives to report fisheries-related crimes.		
		- Increase VMS coverage to cover all fishing vessels inclusive of those involved in the sports fishery.		
Institutional strengthening of SFA Improve institutional infrastructure, build core competencies and strengthen the internal procedures of SFA to build and inspire human capacity for better service delivery.	2.1 Improve infrastructure to provide for conducive working environment for staff.	- Improve existing and build new offices, scientific and support facilities.		
		- Improve existing and acquire new fisheries research and enforcement vessels.		
		- Replace and expand the existing fleet of vehicles to improve service delivery.		
	2.2 Build core competencies across the organization required for execution of organizational mandates.	- Undertake detailed capacity needs assessment.		
		- Set-up and implement a targeted capacity building programme to improve service delivery.		
		- Establish strategic partnerships with local and international scientific research, fisheries enforcement and other institutions.		
		- Introduce new employee scheme of service.		
	2.3 Enhance the quality of services provided and facilitate the decision making process through more effective use of Information and Communication Technology.	- Undertake detailed ICT needs assessment.		
		- Improve existing and acquire new ICT infrastructure.		
		- Introduce online administrative, finance, procurement, verification and business continuity systems.		
		- Maintain an updated online searchable database of		

		publications in SFA's documentation center.			
	2.4 Build a strong organization image and improve public awareness.	- Develop and implement a Communication and public relations strategy. - Recruit personnel and acquire equipment, materials and infrastructure. - Build linkages with ICT platforms.			
Ensure the sustainability of fisheries resources 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 and global developments.	3.1 Ensure that all fisheries and related industry are sustainable and economically viable through enhanced planning, performance evaluation and stakeholders' participation.	- Integrate eco-system based and co-management approaches in all fisheries resource management initiatives			
		- Formulate management plans, which includes biological, economic and social aspects, for all local commercial fisheries.			
		- Institutionalize stakeholders' engagement in fisheries resource management.			
		- Introduce measures to mitigate impacts to by-catch in the tuna fisheries			
		- Introduce harvest strategies for vulnerable commercially targeted species.			
		- Undertake annual review of performance of all management measures in place.			
		- Undertake an economic assessment of on-going fisheries activities.			
	3.2 Develop fisheries and aquaculture infrastructure in line with emerging priorities while ensuring sustainability.	- Prepare an infrastructure development plan which is in line with fisheries and aquaculture management and sector development plans.			
		- Prioritize infrastructure development that promotes development of new fisheries, aquaculture, local processing and value addition.			
		- Develop research and development facilities to support sustainable and economically viable aquaculture developments.			
		- Facilitate and support the construction of regional			

		fisheries and aquaculture facilities.			
	3.3 Improve understanding of fisheries, fisheries resources and the ecosystems that supports fisheries through targeted research and surveys.	- Prepare a research plan based on fisheries management plans and priorities. - Develop and implement stock assessment plan for each fishery. - Strengthen quality control and breadth of fisheries monitoring and extend fisheries monitoring to include sports fishery. - Support the development of community-based data collection programmes. - Agree on priorities and prepare action plans for collaboration with international research partners.			
Optimize the economic and social benefits of fisheries Ensure that the fisheries sector continues to play a key role in the economic development of the country and the socio-economic well-being of the Seychellois nation.	4.1 Promote Port Victoria as the hub of the Indian Ocean tuna fishery.	- Facilitate the improvement of on-shore facilities for disembarkation, storage, value addition and transshipment of tuna in Port Victoria. - Facilitate development of infrastructures to cater for the needs of industrial and semi-industrial long liners. - Facilitate the development of services supporting the fishing industry. - Identify and facilitate the development of new services for fishing industry in partnership with stakeholders.			
	4.2 Increase the national economic gains from fisheries.	- Promote economic viability within the artisanal fisheries. - Analyze alternatives for increasing resource rent in the tuna fishery. - Strengthen the capacity to collect and analyze socio-economic data for all fisheries. - Develop a plan to improve benefits from the value chain for local fisheries products.			
	4.3 Support and facilitate the development of new fisheries, aquaculture, value	- Identify necessary facilities required for value addition activities.			

	addition, marketing and encourage diversification.	- Support the private sector in the development of new value added products according to market needs.				
		- Promote development of seafood certification schemes for high-end markets.				
		- Support the development of the aquaculture sector.				
	4.4 Formalization of the small-scale fisheries sector through appropriate policies and support to fishermen’s associations, boat owners and fisher.	- Promote the development and sound management of fishermen associations.				
		- Introduce compulsory registration of all full time and part time fishermen.				
		- Harmonize the processes for issuing of licenses to include health, safety and security aspects for boats and fishers.				
	4.5 Encourage consumption of local fish and fisheries products and ensure the freshness of produce reaching the local market.	- Raise awareness of the local population on the nutritional benefits of fish consumption.				
		- Support initiatives to make species such as tuna, by-catch from the tuna fishery and other under-valued fish species more accessible on the local market.				
		- Organize post-harvest handling training for fishermen and people working in fish processing plants.				

7. Resources

7.1 Human resources

In order to implement this Strategic Plan, SFA will have to recruit more staff in some sections and will relook at the job description and set KPIs for all staff with the aim of enhancing productivity. SFA will implement a comprehensive capacity building programme to build core competencies in areas where it is currently under performing. This will include a top-down approach to identifying training requirements and a mix of short, medium and long-term trainings for in service staff. In order to retain capacity once it is developed, SFA will put in place financial and nonfinancial incentives. SFA will build on its pool of technicians while at the same time recruiting staff with skills in project management to ensure that projects are implemented in a timely manner.

7.2 Budget and Financing

To implement this Strategic Plan, SFA will make use of funding it receive from the annual Government Budget and under the EU/Seychelles Fisheries Partnership Agreement. Certain activities can be financed under other financial mechanisms such as the SWIOFish3 Project, the GEF6 allocation and the Blue Bonds, when it becomes available. Each proposed priority action will be assessed at the start of each year and aligned to the most appropriate funding mechanism. At this stage budget projection by Strategic goals are:

Goal 1: SCR 16,253,650 ~ 13.0% of total budget

Goal 2: SCR 35,635,000 ~ 28.6 % of total budget

Goal 3: SCR 55,565,000 ~ 44.6 % of total budget

Goal 4: SCR 17,100,000 ~ 13.7 % of total budget

Total 3 year budget = SCR 124,553,650

	2018	2019	2020
Goal 1: Effective governance arrangements.			
1.1 Strengthen organizational planning and strategic management to improve service delivery.	1,466,000	1,724,000	1,523,650
1.2 Enhance the organization financial, administrative and risk management capability.	175,000	690,000	620,000
1.3 Close gaps in the legal framework and ensure that legislation meets the requirement for effective control of fisheries and aquaculture value chain.	450,000	-	-
1.4 Improve compliance to fisheries regulations.	2,125,000	3,710,000	3,770,000
Goal 2: Institutional strengthening of SFA.			
2.1 Improve infrastructure to provide for conducive working environment for staff.	6,020,000	10,200,000	10,300,000
2.2 Build core competencies across the organization required for execution of organizational mandates.	1,040,000	1,310,000	1,450,000
2.3 Enhance the quality of services provided and facilitate the decision making process through more effective use of Information and Communication Technology.	20,000	1,010,000	20,000
2.4 Build a strong organization image and improve public awareness.	1,450,000	1,385,000	1,430,000

Goal 3: Ensure the sustainability of fisheries resources.			
3.1 Ensure that all fisheries and related industry are sustainable and economically viable through enhanced planning, performance evaluation and stakeholders' participation.	110,000	565,000	270,000
3.2 Develop fisheries and aquaculture infrastructure in line with emerging priorities while ensuring sustainability.	14,400,000	19,000,000	19,000,000
3.3 Improve understanding of fisheries, fisheries resources and the ecosystems that supports fisheries through targeted research and surveys.	860,000	680,000	680,000
Goal 4: Optimize the economic and social benefits of fisheries.			
4.1 Promote Port Victoria as the hub of the Indian Ocean tuna fishery.	1,450,000	1,450,000	1,650,000
4.2 Increase the national economic gains from fisheries.	1,050,000	950,000	300,000
4.3 Support and facilitate the development of new fisheries, aquaculture, value addition, marketing and encourage diversification.	2,675,000	2,550,000	2,450,000
4.4 Formalization of the small-scale fisheries sector through appropriate policies and support to fishermen's associations, boat owners and fisher.	150,000	750,000	400,000
4.5 Encourage consumption of local fish and fisheries products and ensure the freshness of produce reaching the local market.	525,000	500,000	250,000
TOTAL	33,966,000	46,474,000	44,113,650

Tab. 1. Budget estimate for the implementation of priority actions identified as part of this Strategic Plan (2018 – 2020).

8. Review of this Plan

This plan will be reviewed at the start of each year to assess performance of the previous year. Responsibility for the review will lie with the CEO of SFA who can delegate the responsibility to a specific unit, staff or an external consultant. Performance will be assessed against the KPIs listed for each priority action in the Performance Measurement System. By June 2020, the process should start to completely review the performance of this strategic plan and to draft a new Strategic Plan for SFA for the next three years in line with the Fisheries and Aquaculture Sector Development Plans.



Seychelles Fishing Authority Strategic Plan 2018 – 2020

Volume 2 Goals and strategies

May 2018

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Acronyms and Abbreviations

ANHRD	Agency for National Human Resource Development
BMSY	Biomass at Maximum Sustainable Yield
CBS	Central Bank of Seychelles
CCS	Central Cold Storage
CEO	Chief Executive Officer
ERS	Electronic Reporting System
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FMSY	Fishing Mortality at Maximum Sustained Yield
FPDC	Fishing Port Development Committee
IOTC	Indian Ocean Tuna Commission
IT	Information Technology
IUU	Illegal Unreported and Unregulated (Fishing)
JICA	Japan International Cooperation Agency
KPI	Key Performance Indicator
MCS	Monitoring control and surveillance
MEECC	Ministry of Environment, Energy and Climate Change
MFA	Ministry of Fisheries and Agriculture
MSY	Maximum Sustainable Yield
MT	Metric Ton
NBS	National Bureau of Statistics
NDEA	National Drug Enforcement Agency
NDL	No Decompression Limit
NGOs	Non-Governmental Organisations
OFCF	Overseas Fisheries Cooperation Foundation (Japan)
PESTEL	Political, Economic, Social, Technological, Environmental and Legal (Analysis)
POU	Procurement Oversight Unit
PSSR	Personal Safety and Social Responsibility
PST	Personal Survival Technique
RFMO	Regional Fisheries Management Organisation
SCG	Seychelles Coast Guard
SCR	Seychelles Rupees
SFA	Seychelles Fishing Authority
SMA	Seychelles Maritime Academy
SMSA	Seychelles Maritime Safety Administration
SNAIP	Seychelles National Agriculture Investment Plan
SPA	Seychelles Ports Authority
SWOT	Strengths, Weaknesses, Opportunities, and Threats (Analysis)

Executive Summary

Seychelles' comparative advantage lies with its natural capital. The country is endowed with an extremely rich biodiversity, both marine and terrestrial, and is one of Conservation International's designated biodiversity hotspots. The two most important sectors of the Seychellois economy are tourism and fisheries, both strongly tied to the country marine endowment and its biodiversity. Fisheries account for a significant portion of gross domestic product but are also of considerable social, cultural and nutritional importance to the country. The Seychelles Fishing Authority (SFA) is the principal institution for fisheries in Seychelles, overseeing management, development, research and capacity building. The mandate of SFA as the executive arm of government for the fisheries sector is legislated in the Seychelles Fishing Authority (Establishment) Act (1984) and the Fisheries Act (2014). This mandate is further enshrined in policy, notably the Fisheries Policy (2005) and, more recently, the Seychelles National Agriculture Investment Plan (2016-2020).

As a result of its broad mandates, SFA requires a structure and staff that enables maintenance of a diverse range of technical fields, including: fisheries science and management, natural resource economics, statistics, programming and database management, biology and ecology, as well as administrative and technical support for research vessels, monitoring and surveillance platforms, laboratories and IT. Only by maintaining sufficient capacity will SFA be able to address challenges such as overfishing, overcapitalization and illegal, unreported and unregulated fishing, which requires the strengthening of fisheries governance and capacity for the implementation of operational management plans for each fishery, as specified in the Fisheries Act (2014).

One of the prerequisites for SFA to address the challenges in the fisheries sector is the need to be more strategic in its planning. A Strategic Plan that focuses on the structure, capacity needs and administration of the institution to enhance performance and ensure that the institution fulfils its mandate is urgently needed. This report presents the situational analysis of SFA as of late 2017 and provides the background information on the issues around which the SFA's Strategic Plan should be moulded. This review of SFA's operations and performance is timely for a number of reasons. These include the recent adoption of new legislation and policy for the sector, an increasing need for fishing controls to rebuild stocks, and a greater emphasis on transparency, efficiency and performance within the public sector.

The situational analysis begins with a review of the status of fisheries resources, which SFA is mandated to manage. It indicates that the Yellowfin tuna (*Thunnus albacares*), one of the main species targeted by the industrial pelagic fishery, is overfished and is in a state of overfishing in relation to the IOTC's BMSY and FMSY target reference points. The three other main targeted tuna species (Albacore (*Thunnus alalunga*), Bigeye tuna (*Thunnus obesus*), and Skipjack tuna (*Katsuwonus pelamis*)) are described as not overfished and not subject to overfishing. Catch for demersal fin fish has more or less plateaued at around 4,000 Mt

per year since the early 1990s. A productivity-susceptibility analysis undertaken in 2014 found that most species targeted in the demersal fisheries were highly vulnerable due to high vulnerability to fishing gears (owing to multi-gear operations) and high coverage of the spatial distribution of fishing effort (diverse fleets accessing all areas of the Mahé plateau).

The Emperor red snapper (*Lutjanus sebae*), one of the most sought after species in the plateau demersal fishery that is often used as an indicator of the general health of the fish stock on the Plateau has shown a steady decline in catch between 2008 to 2012. A stock assessment undertaken in 2010 concluded that the exploitation rate were still above the rate to achieve MSY and the stock status was described as overexploited. A further stock assessment undertaken in 2015 found catches of the eight other demersal species for which sufficient data exist was around MSY levels and in some cases exceeded such levels. In the sea cucumber fishery, long-term decrease has been observed in all of the harvested species and it is believed that the stock is overfished. The review indicates a need for SFA to strengthen management of the resource base.

A review of the SFA's performance over the last decade was undertaken in relation to its key functions as defined by the SFA's mandates, and in relation to government policies for fisheries as defined in *The Seychelles Fisheries Policy 2005* and against the *FAO's Code of Conduct for Responsible Fisheries*. A performance audit evaluation has recently been undertaken on the implementation of the sectoral support provided for the years 2014 and 2015 under the 2014-2020 protocol of the EU/Seychelles Fisheries Partnership Agreement. This performance audit focused on issues of budget execution, governance, planning, procurement process and the SFA's accounting system and was used to inform on the performance of SFA with regards to these areas.

In summary, the performance reviews indicated that the SFA had very broad mandates and had been given new resource intensive responsibilities over the years that in many cases has taken its focus away from its main duties of managing the fisheries. While SFA has done a good job at developing the fisheries sector, it is now felt that it requires a new focus on sustainable resource management if the Seychelles fisheries is to remain sustainable. All reviews of the main instruments with which SFA works have assigned lower scores for the implementation of activities concerned with resource management, which indicates that not enough resource management is taking place. The divisions responsible for resource management, research and compliance should be strengthened and resource management plans should be prepared and implemented to address such issues.

At the same time SFA should continue to improve economic gains from the fisheries sector by putting the necessary structures in place for more local processing, value addition, development of the mariculture sector and increasing revenue from resource rent. Now that the Ministry of Fisheries and Agriculture (MFA)

has more capacity to deal with policy and negotiation related matters, SFA should take a back sit role and focus on the implementation of its operational mandates while continuing to provide technical support to the Ministry through robust data analyses and provision of management and development advice.

If SFA is to increase its effectiveness it needs to become more result orientated and increase planning and performance evaluation at the institutional and section levels. The preparation of a strategic plan is a step in the right direction. This should be followed by detailed section plans with clear targets and performance indicators. Every year money are spent on audit, performance evaluation and technical reports. Many good recommendations comes out of these assignments but it appears that there is little follow up. This lack of follow up is most probably due to the high workload of certain key personnel at SFA. SFA should endeavour to increase the capacity of its staff through a targeted capacity building programme and the recruitment of professionals that can manage programmes and activities, even if they do not have a fisheries background.

The institutional diagnostic analysis undertaken has indicated that while the SFA has a number of very pertinent weaknesses and threats that could continue to undermine its operation and affect its public image, the weaknesses, i.e. issues that is internal to the functioning of SFA and hence could be more easily dealt with, are of greater course of concern than external issues and can be adequately addressed by making use of the SFA's identified strengths and opportunities. Access to funding provided under the sectoral policy support funds of the EU/Seychelles Fisheries Protocols under the Fisheries Partnership Agreement is a very important strengths that no other government organization have. Part of this fund can be used to support with the implementation of the SFA Strategic Plan (Volume 1), especially with the re-organization of the SFA finance and project management sections as recommended as part of the performance audit evaluation report of the implementation of the sectoral support provided for the years 2014 and 2015 under the 2014-2020 protocol of the EU/Seychelles Fisheries Partnership Agreement.

The situational analysis has highlighted a number of pertinent issues that needs to be addressed as part of the new strategic plan that is to be prepared for the SFA. Since the fisheries sector essentially has three main components: The fisheries resources, the management institution and the fishers, for reasons of simplicity it is recommended that SFA establishes three main strategic goals to address each of the main components identified above.

Goal 1 should focus on the *institutional strengthening of SFA* and should have strategies that addresses issues such as organizational planning, strategic management, service delivery, working conditions for staff, performance evaluation, financial, administrative and risk management capability, training and capacity building, improving institutional infrastructure and facilities, organizational image, visibility and awareness. The expected outcome is that SFA becomes a strong fisheries management organization that is able to provide good working conditions for its staff and can fully implemented its given mandates.

Goal 2 should focus on *ensuring the sustainability of fisheries resources* and should have strategies that addresses issues such as improving fisheries management, fisheries research, improving compliance, strengthening the legal framework and planning fisheries development that are in tandem with the status of the resource base. The expected outcome is that the development and management of the fisheries sector is done in a manner which ensures that the resource base remains sustainable.

Goal 3 should focus on *the economic and social aspects of fisheries* and should have strategies that addresses issues such as maintaining the competitiveness of Port Victoria, increasing revenue from fisheries, development of the mariculture sector and value addition, providing support to fishers and encouraging the local consumption of fisheries products. The expected outcome is that fisheries continues to contribute to the socio-economic development of the country.

1. Introduction

1.1 Rationale

Seychelles' comparative advantage lies with its natural capital. The country is endowed with an extremely rich biodiversity, both marine and terrestrial, and is one of Conservation International's designated biodiversity hotspots. The two most important sectors of the Seychellois economy are tourism and fisheries, both strongly tied to the country marine endowment and its biodiversity. Fisheries account for a significant portion of gross domestic product but are also of considerable social, cultural and nutritional importance to the country. The Seychelles Fishing Authority (SFA) is the principal institution for fisheries in Seychelles, overseeing management, development, research and capacity building. The mandate of SFA as the executive arm of government for the fisheries sector is legislated in the Seychelles Fishing Authority (Establishment) Act (1984) and the Fisheries Act (2014). This mandate is further enshrined in policy, notably the Fisheries Policy (2005) and, more recently, the Seychelles National Agriculture Investment Plan (2016-2020).

The fisheries sector has grown substantially since the 1980's, driven primarily by the development of the Indian Ocean purse seine tuna fishery that uses Port Victoria as the regional hub for landings and transshipment. Artisanal fisheries and a local semi-industrial long line fishery for tuna and swordfish have also developed in the last few decades. SFA was established to promote and regulate fisheries, with a remit encompassing capture, post-harvesting and service components of seafood value chains. The institution has therefore attempted to balance sustainability with the economic objectives of a wide range of stakeholders invested in the sector, ranging from small-scale fishers to highly industrialised fishing operators, while ensuring that other societal objectives, such as conservation and social equity, are also met. Consequently, SFA must maintain a high level of technical capacity to meet the challenges and opportunities posed by the sector.

SFA requires a structure and staff that enables maintenance of a diverse range of technical fields, including: fisheries science and management, natural resource economics, statistics, programming and database management, biology and ecology, as well as administrative and technical support for research vessels, monitoring and surveillance platforms, laboratories and IT. Only by maintaining sufficient capacity will SFA be able to address challenges such as overfishing, overcapitalization and illegal, unreported and unregulated fishing, which requires the strengthening of fisheries governance and capacity for the implementation of operational management plans for each fishery, as specified in the Fisheries Act (2014). Fisheries co-management and civil society engagement constitute important opportunities for sharing governance responsibilities, but also require dedicated SFA support for capacity building, monitoring and administration. SFA is further called upon to support the development of infrastructure, services and

training for the sector, while also being responsive to acute challenges or emerging issues such as harmful algal blooms and climate change. The importance of education and training cannot be underestimated if SFA is to deliver on this varied mandate.

A review of SFA's operations and performance is timely for a number of reasons. These include the recent adoption of new legislation and policy for the sector, an increasing need for fishing controls to rebuild stocks, and a greater emphasis on transparency, efficiency and performance within the public sector. SFA currently suffers from a lack of capacity to deliver its mandate, caused by losses of professional staff to the private sector and the need to send staff overseas for capacity building.

1.2 Assignment's objectives

The objective of this assignment is to develop a Strategic Plan for SFA that focuses on the structure, capacity needs and administration of the institution to enhance performance and ensure that the institution fulfils its mandate. In order to prepare the Strategic Plan a diagnostic of SFA's current situation is required. This report presents the diagnostic of SFA as of late 2017.

2. The Seychelles Fishing Authority

The Seychelles Fishing Authority (SFA) was created in August 1984 at a time when the industrial tuna fishing sector was experiencing intense development. The objective of SFA was to develop the fishing industry to its fullest potential and to safeguard the resource base for sustainable development. The organization employs more than 150 staff and a number of operational sections involved in: fisheries management, economic planning, research, mariculture development, fishing ports operation, value addition, infrastructure development, licensing, data and statistics, monitoring, control and surveillance and providing support to fishermen. The SFA works in close collaboration with the Ministry of Fisheries and Agriculture (MFA), the Ministry of Environment, Energy and Climate Change (MEECC), the Seychelles Coast Guard (SCG), the Seychelles Ports Authority (SPA), other Government institutions, fishermen and boat owners associations, local and international NGOs, universities, suppliers, development agencies and other partners. Stakeholder consultations are held on a regular basis regarding the development of the sector.

2.1 SFA's vision

The present vision of SFA is *to develop the fishing industry to its fullest potential and to safeguard the resource base for sustainable development.*

2.2 Official mandates

The official mandates of the SFA are defined under Section 5 of the Seychelles Fishing Authority (Establishment) Act of 1984. Its powers are defined under Section 6 of the same Act with additional, more specific powers defined under the Fisheries Act (2014) and the Fisheries Regulations (1987). SFA's mandates as stipulated in the Establishment Act are:

- (a) to promote, organize and develop fishing, fishing industries and fishing resources in Seychelles;
- (b) to assist in the formulation of the national policy with respect to fishing, fishing industries and fishing resources and in the implementation of that policy;
- (c) to conduct negotiations, or engage in meetings, seminars or discussions, with regard to fishing or fisheries or the establishment or operation of fishing industries, whether at a national or international level, on behalf of the Republic or otherwise;
- (d) to identify the manpower training requirements of Seychelles with regard to fishing and fishing industries;
- (e) Those mentioned in any other written law.

2.3 Corporate governance

The day to day operations of the SFA is overseen by its Chief Executive Officer (CEO) who is supported by a Board of Directors and a Deputy CEO. The CEO, Deputy CEO and Directors are appointed by the President of the Republic. Members of the Board are appointed for a renewable period of two years. The governance structure of the SFA is well detailed in the Seychelles Fishing Authority Establishment Act (1984). The Act clearly list the functions (Section 5) and powers (Section 6) of the Authority and details functions of the Board of Directors (Section 7). However, the SFA Establishment Act fails to detail the roles of the Ministry responsible for fisheries and the Minister in providing policy oversight. This gap is partially addressed through the Seychelles Fishing Authority's Board Charter (2016) which clearly defines responsibilities and operating procedures of the Board of directors and obligations of the Authority to the Government and details the supervisory powers of the Minister responsible for Fisheries. The powers of SFA are broad and ranges from monitoring catch to conducting surveillance, exporting fish and entering into joint ventures. However, in the last decade SFA has removed itself from commercial ventures and have focused more on developing the fisheries sector and managing the resource base.

2.4 Structure and staffing

The Seychelles Fishing Authority has a total of 133 staff on the nominal role and is divided into 4 operational and 2 support division. Each of the division is headed by a Senior Manager. The Divisions are:

1. Fisheries Management Division
2. Fisheries Research Division
3. Monitoring Control and Surveillance Division
4. Fisheries Economics and Information Division
5. Human Resources and Administration Division
6. Finance and Procurement Division

A description and analysis of each division is given in Section 5.4.

2.5 Funding

The SFA gets its funding from Government through the annual budget and through the sector policy support funds of the EU/Seychelles Fisheries Protocols under the Fisheries Partnership Agreement.

2.6 Legal Framework for Fisheries Management

Fisheries in the Seychelles is legislated under the Fisheries Act (2014), which came into force in January 2015. This replaced the Fisheries Act of 1986 (revised in 2010). Despite the fact that the Act has been updated, fisheries continue to be regulated under the Fisheries Regulations of 1987 (amended in 2007, 2010). A detailed review of the fisheries and related national legislation was undertaken in 2015 with the purpose of identifying legislative gaps and inconsistencies and how they may be addressed using the IOTC Legislative Framework. Despite the fact that The Fisheries Act 2014 and Fisheries Regulations were reviewed only in relation to implementing IOTC requirements, the review picked up many serious concerns. These concerns include inconsistent or conflicting provisions, incorrect use and interpretation of legal terms, incorrect and sometimes incomprehensible use of language in general, restrictive approaches and content, errors in spelling, punctuation and numbering and the absence of implementation of international law and best practices. These shortcomings were found to occur throughout the Act and was deemed to “*compromise its integrity*”.

3. Status of Fisheries Resources

The Yellowfin tuna (*Thunnus albacares*), one of the main species targeted by the industrial pelagic fishery, has recently been described as overfished and subject to overfishing in relation to the IOTC's BMSY and FMSY target reference points. The three other main targeted tuna species (Albacore (*Thunnus alalunga*), Bigeye tuna (*Thunnus obesus*), Skipjack tuna (*Katsuwonus pelamis*)) are described as not overfished and not subject to overfishing. Caution is however advised in the management of these three species since average catch for the period of 2011-2015 has been close to MSY. Catch of Swordfish (*Xiphias gladius*) in 2015 was over MSY and should be returned to < MSY. Tab.1. summarizes the management advice that is recommended for each of the major stocks in the industrial fishery.

Species	Average catch (2011-15)	Stock status	Management advice
Skipjack (<i>Katsuwonus pelamis</i>)	394,320		No additional measures required
Yellowfin (<i>Thunnus albacares</i>)	390,185		Implement IOTC Resolution 17/01
Bigeye (<i>Thunnus obesus</i>)	101,515		No additional required if Catch < MSY
Albacore (<i>Thunnus alalunga</i>)	34,902		Cap total catch to MSY (~ 40,000 t)
Swordfish (<i>Xiphias gladius</i>)	31,900		Reduce catch to < MSY

Tab.1. Average catch, stock status and management advice for the main targeted species in the industrial fisheries

Catch for demersal fin fish has more or less plateaued at around 4,000 Mt per year since the early 1990s. A productivity-susceptibility analysis undertaken in 2014 found that most species targeted in the demersal fisheries were highly vulnerable (Fig. 1) due to high vulnerability to fishing gears (owing to multi-gear operations) and high coverage of the spatial distribution of fishing effort (diverse fleets accessing all areas of the Mahé plateau) (Fig. 2).

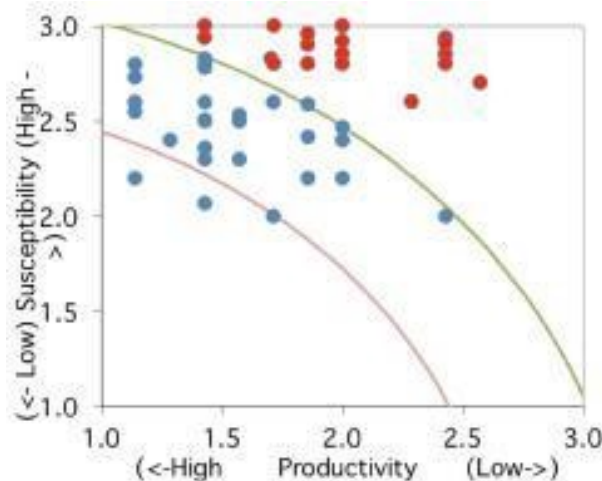


Fig.1. Productivity-susceptibility analysis (PSA) of 51 fisheries caught by the demersal fishery in Seychelles. Red dots represent those species categorized at high risk. Source: Gutierrez (2014).

In addition to high vulnerability, some species have low productivity therefore exacerbating their risk to overfishing. The Emperor red snapper (*Lutjanus sebae*) is the most sought after species in the plateau demersal fishery and is often used as an indicator of the general health of the fish stock on the Plateau. Concerns over the status of *L. sebae* stock were raised in 2004 when catches of this species began to increase dramatically. Prior to 2004, this species had been harvested at around the Maximum Sustainable Yield (MSY; 380 Mt) for over 10 years. By 2007 catch of this species had reached 1077 Mt per annum and had more than tripled MSY. This highlighted that there were major risks from continued targeting at those levels.

From 2008 to 2012 a steady decline was observed in catches and a stock assessment undertaken in 2010 concluded that the exploitation rate were still above the rate to achieve MSY and the stock status of emperor red snapper was described as **overexploited**. Stock assessment undertaken in 2015 came up with the same result. The 2015 stock assessment exercise found catches of the eight other species for which data was available for stock assessment to be around MSY levels and in some cases exceeded such levels.

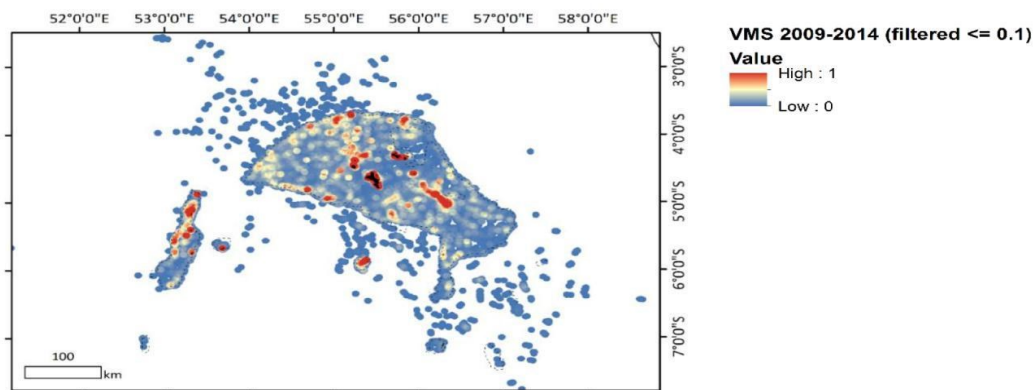


Fig.2. Map showing the distribution of fishing effort by the Seychelles artisanal whaler and schooner fleets constructed from VMS data for the year 2009 to 2014.

The sea cucumber fishery has been observing a decline in catch since catch peaked in 2011 with more than 600,000 individuals collected. The long-term decrease has been observed in all of the harvested species and it is believed that the stock is overfished. The lobster fishery is characterized by a boom and bust cycle with the fishery being kept open for several consecutive seasons followed by a period of closure to allow the stock to recover. Clear shifts have been observed in size composition of lobsters caught with a decrease in the proportion of larger lobsters observed in recent years. This have been attributed to high fishing pressure. There is a fishery for the spanner crab, *Ranina ranina*, but the fishery is seasonal and the stock is considered to be underexploited.

Aquaculture production is low with only one aquaculture farm in operation producing Black lipped oyster (*Pinctada margaritifera*) and Winged oyster (*Pteria penguin*) with annual production of about 8,000 pearls per year.

4. Performance Review

A review of the SFA's performance over the last decade is undertaken in relation to its key functions as defined by the SFA's mandates, and in relation to government policies for fisheries as defined in *The Seychelles Fisheries Policy 2005*. A recent performance audit of SFA in relation to the implementation of the 2014-2020 protocol of the EU/Seychelles Fisheries Partnership Agreement was undertaken in 2016. As a large proportion of SFA's operational activities are funded through the sectoral support under this protocol, additional audit was not warranted as part of this diagnostic analysis. However, the major issues raised as part of the performance audit are summarized to provide an overall picture of SFA's ability to implement priority activities which have been budgeted and to highlight areas needing attention.

4.1 SFA's performance against mandates

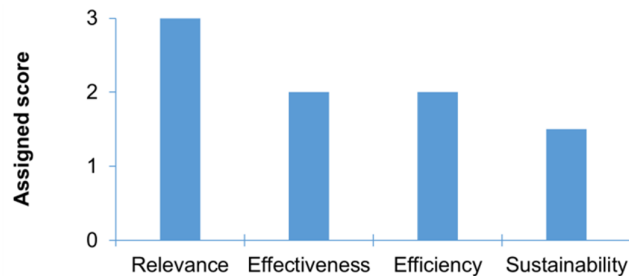
Performance of SFA against its mandates, defined by the SFA Establishment Act, was assessed using four criteria which include relevance, effectiveness, efficiency and sustainability. The definition of each criteria, weighing, rating description and rating value is outlined in Tab 2. The performance assessment was done in November 2016 in a workshop environment with the Senior Managers of the Seychelles Fishing Authority. The interpretation of each mandate was discussed in details and consensus was reached among the managers on the performance score that was to be assigned for each criterion.

Criterion	Weight (%)	Definition	Rating description	Rating value
1. Relevance	20	The consistency of the mandate with activities that SFA is currently doing/or needs to do	Highly relevant Relevant Partly relevant Irrelevant	3 2 1 0
2. Effectiveness	30	The extent to which the outcome has been achieved	Highly effective Effective Less effective Ineffective	3 2 1 0
3. Efficiency	30	How economically resources have been converted to results	Highly efficient Efficient Less efficient Inefficient	3 2 1 0
4. Sustainability	20	Likelihood for an outcome to be maintained over its economic life	Most likely Likely Less likely Unlikely	3 2 1 0

Tab. 2. Criteria used for evaluating the performance of the Seychelles Fishing Authority in relation to its mandates as per the SFA Establishment Act (1984) as over the last decade.

Mandate 1: *To promote, organize and develop fishing, fishing industries and fishing resources in Seychelles.*

The performance of SFA against this mandate got a score of **2.1**. It scored very highly (3/3) in terms of relevance as it was felt that the organization had done a lot to promote, organize and develop the fishing industry. It was positively noted that there



has been a gradual handing over to the private sector of some of the responsibilities given to SFA as part of this mandate especially in terms of marketing, development of new products, development of new fisheries and introduction of new technologies. It was however also noted that the way that this mandate is written is too broad and includes everything to do with the fishing sector. It was felt that this broad language has been responsible for some of the issues that SFA has been encountering in implementing activities which are not at the core of its current operation such as the provision of ice, management of the fuel incentive scheme and the management of fishing ports.

One of the weaknesses identified in the wording of this mandate is the lack of specific mention of sustainable management of fisheries resources. The word “*organize*” could be interpreted to also include fisheries management but this is not clear. When SFA’s mandates were defined in 1984, the industrial fishing industry had just started and the emphasis at that time was on the development of the industrial tuna fishery. Now that the fishery is almost fully developed, there should be a shift from fisheries development towards value addition and sustainable management to ensure that the resource base remains healthy and are able to sustain the fishery that have developed around it.

A score of 2/3 was assigned for effectiveness in SFA’s implementation of this mandate. It was argued that SFA has been effective in building the infrastructures required for the development of the fisheries and the fishing sector. The down side was that there has been no clear plans for the control of fishing development (*sector development plans*) and fisheries management (*fisheries management plans*). Development in the fisheries sector have been done haphazardly and there has been little in terms of concrete planning. For example, the artisanal demersal fleet has been allowed to increase to a point that if all boats were to go fishing, the resource would rapidly decrease to unsustainable level. On the tuna fisheries side, there has been no clear plan for domestication of the fishing activities. The lack of advance planning, the reactive approach to fisheries development, inappropriate consideration of enterprise risks along with lack of proper guidelines has reduced the efficiency of the work that has been undertaken by SFA in fulfilment of this mandate.

Sustainability was the main down side of SFA on the delivery of this mandate. While a lot of the activities that were implemented have produced results, in many instances these results have not been sustained. In many instances, low level of sustainability has been the result of a lack of funding, lack of cost-recovery system in place, lack of monitoring and supervision, staffing and lack of organization at the management and section level. Examples of some issues of unsustainability includes district markets which are not used, ice plants which have not been repaired, VMS systems which are regressing in terms of numbers, processing plants which have not been built according to the right specifications, quays which have been built for certain purposes and used for others, research programmes which have not been followed through, well trained staff which have been made redundant and management plans which have been delayed in implementation.

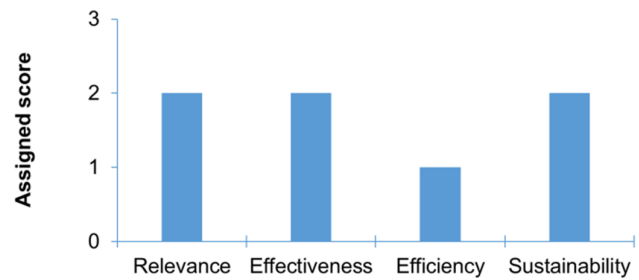
Recommendations:

- (1) The Establishment Act of SFA should be revised and updated to ensure that SFA's mandates and priorities are in line with contemporary needs in fisheries development and resource management. There should be more emphasis on sustainable management of the resource base to reflect the new SFA's vision which has been developed as part of the strategic planning process and international best practices for fisheries management.
- (2) SFA should assume a more proactive role in the planning of the fisheries sector and should have clear plans for the development and management of the sector (Fisheries Sector Plan and Mariculture Sector Plan that needs to originate from the Ministry of Fisheries and Agriculture) and for managing the fisheries (Fisheries Management Plans).
- (3) Key Performance Indicators (KPIs) should be identified against which all SFA initiatives should be evaluated. These KPIs should make it easier to evaluate SFA's performance in the future with respect to effectiveness, efficiency and sustainability.

Mandate 2: *To assist in the formulation of the national policy with respect to fishing, fishing industries and fishing resources and in the implementation of that policy.*

The performance of SFA against this mandate got a score of **1.7**. The relevance of this mandate to the work that SFA is doing got relatively high scores (2/3). However, it was felt that policy orientation should have been driven from the level of the Ministry responsible for fisheries with SFA being responsible for providing technical advice. Due to a limited number of personnel with strong understanding of the fisheries sector in the secretariat of past ministries of fisheries, much of the policy formulation was being done from SFA's side, thus digressing SFA from its role of assisting policy formulation, to a new more resource intensive role of leading policy formulation.

It was generally felt that SFA has been quite effective in delivering on this mandate. Many technical documents with proposals for new policy orientation have been prepared in the past. Due to a lack of technical staff at the ministerial level to take forward these recommendations effectiveness have not been optimized and progress have been much slower than anticipated. It was generally felt that certain policies have not been implemented in the most efficient manner and that the political environment did not always allow for the implementation of policies as they were originally intended.



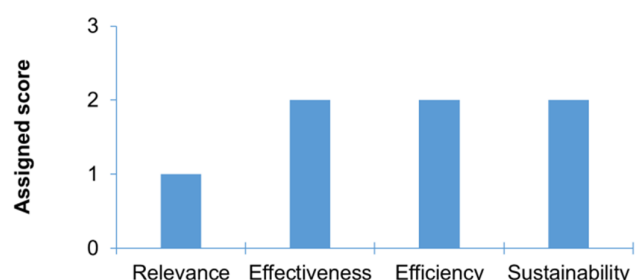
Sustainability wise, it was generally felt that most of the work that SFA has been doing in assisting the formulation of national policies were very good. SFA has been able to back up the need for new policies with good data and strong arguments. General agreement was that new policies which have been introduced in fisheries have positively influenced the sector and were in most cases are sustainable. However, not necessarily as a fault of SFA, it was felt that certain national policies and plans dealing with food security have only included fishery as an appendage. The Seychelles National Agriculture Investment Plan (SNAIP) was one such plan that was specifically mentioned. Within the SNAIP fisheries is specifically addressed in only one of the five work programmes.

Recommendations:

- (1) SFA should continue to identify issues of concern in Seychelles fisheries and to make proposals to the Ministry of Fisheries and Agriculture on new policies that government should adopt to mitigate possible negative impacts and to increase overall net socio-economic benefits from the fisheries sector.
- (2) SFA should review its data collection programmes to ensure their relevance, scope and usefulness for the provision of policy advice.
- (3) More efforts should be placed on automating certain types of data analyses (e.g. through the use of R Scripts) to increase the availability of analyzed data for decision making. More statisticians should be recruited for this purpose. SFA should also make use of short-term consultancies for fisheries data experts to prepare templates and scripts required for these analyses.
- (4) Reporting done by SFA to the Ministry of Fisheries and Agriculture should ideally have a section entitled “*Policy implications*” to highlight how issues being observed in the fisheries sector might affect government policies that are in place.

Mandate 3: *To conduct negotiations, or engage in meetings, seminars or discussions, with regard to fishing or fisheries or the establishment or operation of fishing industries, whether at a national or international level, on behalf of the Republic or otherwise.*

The performance of SFA against this mandate got a score of **1.8**. Conducting negotiations, especially as part of bilateral or multilateral agreements, was seen to be the role of the Ministry responsible for Fisheries with SFA playing a supporting role. However, conducting operational



negotiations was acknowledge to be fully part of the work that SFA should be doing. Due to the lack of a proper unit at the Ministry to undertake such work, SFA has been responsible for undertaking much of the negotiations on behalf of the government.

The relevance of this mandate to SFA's work got a low score (1/3), mostly as the result of SFA having had to take lead on this mandate when it in fact should have been playing a more supportive role. Though part of this mandate was not seen to be relevant to the work of SFA, it was acknowledge that the SFA and government has been quite effective in negotiating good deals in the past especially with regards to rent for access to fisheries resources with the EU as part of the Seychelles/EU Sectoral Agreement. The general opinion was that Seychelles has been able to get good deals from excesses and under declaration. The SFA has continually remained engaged with its other international partners such as the Overseas Fisheries Cooperation Foundation (OFCF) of Japan which have helped Seychelles on several occasions with the construction of fishing ports.

In terms of the efficiency with which this mandate was implemented, it was felt that SFA could have done better if there were greater preparedness for conducting negotiations with international partners. It was argued that because of a lack of collection and analysis of economic data coming from the industrial fisheries it was difficult for Seychelles to argue its point for even higher rent during negotiations. As many of the negotiations and agreements that were reached tended to be long-term, sustainability in the implementation of this mandate was seen as having been good with an assigned score of 2/3.

Recommendations:

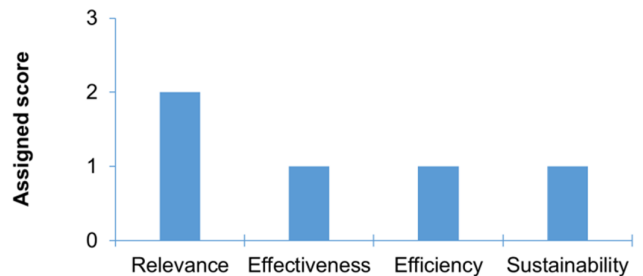
- (1) SFA should continue to play a supporting role to the Ministry of Fisheries and Agriculture in conducting international negotiations concerning fisheries. This role should be in terms of collecting and analysing fisheries sector data, doing targeted research and studies, undertaking due diligence checks and providing policy advice.

(2) SFA should increase the visibility of its programmes and projects supported by its international partners so as to provide due acknowledgment of support and to heighten their interest in continuing to assist the Seychelles fisheries sector.

(3) SFA should increase its level of contact with operators in the fisheries sector through regular meetings to identify issues of concern and possible solutions.

Mandate 4: *To identify the manpower training requirements of Seychelles with regard to fishing and fishing industries.*

The performance of SFA against this mandate got a score of **1.2**. This mandate was thought to be highly relevant to the work that SFA is doing and scored 2/3. However, it got very low score for effectiveness (1/3) and efficiency (1/3), particularly due to the



fact that SFA had not prioritized this mandate and had not allocated any staff to work on manpower training requirements outside the need of SFA. The sustainability score was also low (1/3) due to the fact that there has been no long-term plan to develop manpower requirement in the sector and coupled with the fact that there has been little interaction on capacity development with the Seychelles Maritime Academy (SMA) and the Agency for National Human Resource Development (ANHRD) in implementing this mandate. *The Performance audit evaluation of the implementation of the sectoral support provided for the years 2014 and 2015 under the 2014-2020 protocol of the EU/Seychelles Fisheries Partnership Agreement.* Report also discusses this issue and recommended that the Ministry of Agriculture and Fisheries considers having a Human Resource Development focal person at the Ministry in order to oversee capacity development issues of the entire fisheries sector i.e. careers in the fisheries sector, training at different levels and promoting the professionalization of fishermen. The report further proposed that the focal person should work with industry stakeholders and the ANHRD to ensure that the national human resource development plans reflect the needs of the fisheries sector.

Recommendations:

(1) SFA or the Ministry of Fisheries and Agriculture should consider having a Human Resource Development focal person to oversee manpower and capacity building requirements in the fisheries sector.

4.2 SFA's performance against the Seychelles Fisheries Policy (2005)

The Seychelles Fisheries Policy (2005) has a long term policy objective and seven sub-objectives and 26 policy statements and 32 strategies. The long-term policy objective is “*the promotion of sustainable and responsible fisheries development and optimisation of the benefits from this sector for the present and future generations.*” The sub-objectives are:

- (1) To promote conservation and management of marine resources in order to ensure the sustainability and long-term viability of the industry.
- (2) To generate the maximum amount of employment.
- (3) To maximise revenue from fisheries and other related activities.
- (4) To promote an integrated economy.
- (5) To enhance food supply and food security.
- (6) To promote safety at sea.
- (7) To maintain Port Victoria as the major tuna landing/transshipment port in the Western Indian Ocean.

The policy statements and strategies are made in relation to research and development, resource management, monitoring control and surveillance (MCS), international agreements and co-operation, legislative framework, institutional framework, investment, trade and commerce, *infrastructure development*, employment, human resource development and training.

SFA's performance in relation to the Seychelles Fisheries Policy (2005) was assessed against the seven policy sub-objectives. Once again, the performance against the policy sub-objectives were assessed in a workshop environment with the Senior Managers of SFA. Implementation with regards to each sub-objective were classified in five categories (poor, fair, average, good, very good) with each category given numerical score with poor = 0, fair = 1, average = 2, good = 3, very good = 4. Fig. 3 summarizes the results across the 7 sub-objectives. Recommendations are provided after the analysis of each sub-objectives.

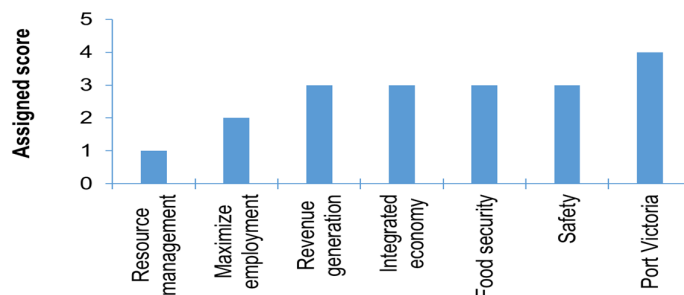


Fig.3. Quantitative representation of performance of the Seychelles Fishing Authority against the seven policy sub-objectives in the Seychelles Fisheries Policy (2005).

Sub-objective No.1: To promote conservation and management of marine resources in order to ensure the sustainability and long-term viability of the industry.

Rating: **Fair**

Rationale: The fisheries have mostly been managed without any management plans and the monitoring control and surveillance measures in place have been inadequate for most fisheries. Until recently none of the fisheries had any output controls. The demersal fishery is still open access, with the only form of control being in mesh size for fish traps and the prohibition of certain types of destructive gears such as poison, dynamite and spear gun. The charter fishery remains largely uncontrolled and there is no reliable data on catch and effort from this fishery. It is believed that catch from this fishery could be as high as from the formal artisanal fishery for which SFA collects data. Subsidies have helped to maintain high level of efforts in the demersal fishery despite of low overall net economic benefits. The industrial fisheries have performed better until recently when the stock of yellowfin tuna (*Thunnus albacares*) went into a state of overfishing requiring the introduction of quotas by the IOTC.

Recommendations:

- (1) To promote conservation and management of marine resources, all commercial fisheries should be managed through a management plan. Maximum Sustainable Yield (MSY) should be calculated for indicator target species. Adaptive management approaches should then be used to bring catch to a level compatible with MSY.
- (2) The Charter fishery should be fully integrated into fisheries management and SFA's Catch Assessment Survey. Measures in the *Mahé plateau demersal trap and line fishery co-management plan* to control output from the charter fishery should be implemented with immediate effect.
- (3) Annual quotas in the industrial tuna fishery established by the IOTC for the year 2017 and 2018 to help the stock of yellowfin tuna to recover should become an integral part of the management of the industrial tuna fishery. SFA should propose to IOTC that annual quota system is maintained as a measure to ensure the sustainability of the tuna fishery.

Policy No.2: To generate the maximum amount of employment

Rating: **Average**

Rationale: With sustainability in mind, this policy should have been focused on *creating optimal employment and higher value jobs* rather than generating *maximum employment*. Official data appearing in the National Bureau of Statistics (NBS) Seychelles in Figures (2016) indicates only 550 jobs in primary

industries, which includes fishing, agriculture and mining. It is however acknowledge that there is major under accounting with regards to these figures and that the real figure of employment in the fisheries sector is much closer to the 6,000 detailed in SFA's 2015 annual report. This policy is directly relevant to SFA's mandate No. 4 "*to identity the manpower training requirements of Seychelles with regard to fishing and fishing industries*". As previously pointed out, the SFA had not assigned staff to work on issues regarding the creation of jobs and manpower development in the fishing sector. There has been no long-term plan on the types and number of jobs that are to be created and there has been little coordination with key stakeholders such as the Seychelles Maritime Academy (SMA) and the ANHRD.

Recommendations:

- (1) SFA or the Ministry of Fisheries and Agriculture needs to establish a unit to work on manpower and training needs in the fishing sector as this is part of its core mandate and the Fisheries Policy (2005). This unit might also work on social issues in the sector as this is an area where data is lacking.
- (2) A strategy and action plan on employment in the fisheries sector should be prepared to ensure that employment and labour issues in the fisheries sector is fully integrated in the work of SFA. A first task as part of this strategy would be a completely census of people working in the fisheries sector and identification of gaps and training requirements.

Policy No.3: To maximize revenue from fisheries and other related activities

Rating: **Good**

Rationale: Revenue generation from the fisheries sector have been good with more than SCR4 billion of export being recorded annually since 2013. Much of this revenue is coming from industrial fisheries and tuna canning. The artisanal fisheries is much smaller and total catch revenue is estimated at SCR169 million. However, cost of operation in the demersal fishery is estimated to be very high. For every SCR100 of fish sold, around SR91 is spent catching the fish. Fishers receive subsidies of about a fifth of their revenue. Around half of the true cost of fishing is fuel and ice, but because of subsidies, these variable costs are lower. They make up 34 % of vessel costs in the fishery today. This enables vessels to continue fishing when they otherwise might not. If the subsidies were suddenly removed, vessels would make fewer trips and some would exit the sector. This could result in an increase in the price of fish as the catch falls. Data on revenue from other fisheries related activities are not easily accessible. Revenue from the fisheries sector would have been much better if there were more focus on local value addition and more ancillary facilities for purse seiners and industrial longlines.

Recommendations:

- (1) SFA needs to put in place strategies to maximize revenue from fishing. These could be wide ranging and include such measures as: encouraging more local processing and value addition, better marketing of underutilized resources, innovative ways of maximizing resource rent, development of new products from fish waste, providing new facilities for repairs and maintenance, etc.
- (2) SFA should better target subsidies in the fisheries sector so as to reduce abuse and deliver on planned economic or management outcomes. Subsidies should be targeted to portion of the fleet which are more vulnerable or particular fisheries that the government would like to develop such as semi-industrial long line. Better targeting of subsidies would also reduce the number of boats and effort in the artisanal fisheries, improve the status of the stock and make the vessels staying in the fishery more profitable.
- (3) Since most stock are already fully exploited, the main avenue for growth in the fisheries sector would be through value addition. Hence, SFA should focus its effort on supporting value addition initiatives and in producing more fish biomass such as through mariculture. Support could come in many forms such as having the right legal framework to ensure that by-catch are landed, to reduce vertical integration, to support the development of new value added products and better marketing of such products and securing access to international markets.

Policy No.4: To promote an integrated economy

Rating: **Average**

Rationale: It was felt that in general there has been little overall coordination between the fisheries sector and other sectors to promote an integrated economy. The focus of development in the fisheries sector have been on infrastructure without much thought about the resource base. The Fisheries Port Development Committee (FPDC) has been the main structure providing oversight on fisheries port development. However the FPDC has up to now not put any system and indicators in place to improve the effectiveness of decision processes. The land-use planning process and allocation of land to develop ancillary services in support of the fishing industry has been obscure and there has been little public consultation on how the fisheries sector could act as a catalyst for the development of other sectors of the economy. The organizational structure of SFA has not helped towards the delivery on this policy with a lack of staff in the economic unit to spearhead activities in line with this policy.

Recommendations:

- (1) SFA, with the involvement of the Ministry of Fisheries and Agriculture, should set up a high level committee to coordinate the development of the fisheries sector and find ways in which fisheries can be used as a catalyst for the development of other sectors and businesses.
- (2) SFA should ensure that development of the fisheries industry is always done with the productivity of the resource base in mind so that fisheries resources do not become depleted and revenue generation from fisheries is reduced.
- (3) The Economic management section should be strengthened through the recruitment of new staff and clear targeted work programme to lead a more economic output driven development of the fisheries sector.

Policy No.5: To enhance food supply and food security

Rating: **Good**

Rationale: Fisheries continues to play an important role in food security, providing a substantial percentage of the protein that is consumed locally. Overall, freshly caught fish are usually plentiful on the local market and the price is usually affordable. SFA has also organized a number of trainings with local fishermen on post-harvest handling so as to guarantee the quality of fish reaching the local market. However, there are still issues regarding the quality of fish on the local market, which is most probably due to post-harvest handling and inappropriate storage. SFA has also worked closely with the Fish Inspection Unit and the Ministry of Health to ensure that the quality of fish exported meets the required international requirement, thereby maintaining Seychelles reputation as a site with quality seafood products. Through the SFA, schemes have been put in place to subsidize fuel and ice for the artisanal fisheries with the objectives of maintaining the price of fish low. However, a report looking at the economic performance of the artisanal fisheries stated that: *“Fish prices are set in international markets, and subsidies have not reduced the prices that Seychellois pay now. Although subsidies were introduced with the intention of making fish cheaper for Seychellois to buy, they have not achieved that outcome.”* With the purpose of enhancing food supply, SFA has also been working on the Mariculture Master Plan with the objective of having a mariculture sector which develop in an orderly fashion and is able to contribute to food production and food security.

Recommendations:

- (1) SFA and the Seychelles Government should ensure that the right policies are put in place to encourage the consumption of fish and fisheries products by the local population. At the same time this should be balance with the need to increase value addition in the fisheries sector.
- (2) The development of low impact mariculture should be encouraged to increase the availability of fisheries product available on the local market and for export purposes.
- (3) As the quality of fish reaching the local market is sometimes an issue, SFA should continually provide training to fishermen, middlemen and fish processors on good fish handling techniques in order to assure fish quality.
- (4) Measures to ensure the traceability of fish and fish products should be put in place so that consumers can be afforded certain level of protection for their fish purchase.

Policy No.6: To promote safety at sea

Rating: **Good**

Rationale: Safety at sea has been relatively good in recent years especially with the reduction of piracy by Somali pirates. The introduction of VMS by SFA, which can also be used as an alarm to notify the authorities in case of accident or breakdown has also helped in reducing incidences of accidents or loss at sea. Independent of SFA, the proliferation of the mobile phone has also improved safety at sea, with fishermen having breakdowns now being able to call for assistance if they are not too far from inhabited locations. New regulations, also makes it mandatory for skippers to undertake Personal Survival Technique, (PST) - Personal Safety and Social Responsibility (PSSR) training as part of the renewal process for their skipper license. Safety at sea has also improved due to the fact that most of the young skippers have passed through formal skipper license training and are aware of the modern safety requirement while at sea. Perhaps the area where there has been most safety concerns have been in the sea cucumber fishery, in cases where divers have greatly exceeded their No Decompression Limit (NDL) or have ascended too fast resulting in decompression sickness, which have resulted in several cases of death and partial paralysis. In 2017, the Ministry of Health made a call on the SFA to have stricter monitoring of the fishing for sea cucumbers to prevent such types of accidents. While boats with hire craft license are by law required to undertake annual safety inspection, no such requirement exist for fishing boats. There are also no regulations imposed by SFA regarding the design, construction, and maintenance of fishing vessels and their gears for safety purposes.

Recommendations:

- (1) SFA should give more attention to the social and safety side of fisheries. At present, SFA has almost no data that is available in an easily retrievable manner on issues concerning the safety of fishermen and people working in the fisheries sector. A unit or sub-unit should be established to work on the social side of the fisheries sector.
- (2) This policy should be extended to consider safety in the whole fisheries industry and not just at sea. In the past five years there has been more reported accidents and deaths of people working on the fishing ports than those at sea.
- (3) Stronger regulations need to be put in place to improve safety in the sea cucumber fishery. Ideally, the onus should be put on boat owners to ensure that their vessel operates under a high safety standard.
- (4) New regulations should be prepared with the involvement of SFA and the Seychelles Maritime Safety Administration (SMSA) requiring annual inspection of local fishing vessels as is presently the case with hire crafts.

Policy No.7: To maintain Port Victoria as the major tuna landing/transshipment port in the Western Indian Ocean

Rating: **Very Good**

Rationale: Port Victoria has remained the hub of the Indian Ocean tuna fishery as a result of its strategic location in the middle of the Indian Ocean tuna fishing ground. In order to maintain this status, Port Victoria has worked on opening up a new tuna fishing quays through a Public Private Partnership and a Central Cold Storage unit (CCS) is being built with capacity to store and sort fish on land before processing locally or exporting either through reefer containers or reefer ships. SFA objectives for the last two decades have been to transform Port Victoria from a mainly tuna transshipment hub to the primary seafood processing center of the Indian Ocean with diversity in products. Along this line SFA has supported the development of new value addition industries making use of by-catch and lower value species either for sale on the local and international market. In developing Port Victoria as the hub of the Indian Ocean tuna fishery, SFA has also worked towards increasing local stakeholding in the semi-industrial fisheries with the setting up of special loan facilities with the Development Bank of Seychelles with the purpose of developing the local semi-industrial long-line fishery. There are however emerging threats from other ports in the region with many of these ports building facilities to attract more purse seiners and industrial long-liners. Better facilities to

handle tuna catches in other ports could reduce the percentage of tuna which is landed in Port Victoria and could have disastrous consequences for the local economy.

Recommendations:

- (1) SFA should continue to support the planning and construction of public infrastructure in order to improve the services provided to the industrial tuna fishing industry in Port Victoria.
- (2) SFA and the government of Seychelles should work with the industry to identify and fill the gap in major services required by the industrial tuna fisheries that are currently lacking in Port Victoria.
- (3) The industrial tuna fishery and the success of Port Victoria as the Indian Ocean tuna fishing hub remains under the control of foreign governments and companies. In order to reduce some of the risks associated with majority foreign ownership in the industrial tuna fisheries, SFA should propose new incentives to encourage local investment in industrial tuna fishing operations.

4.3 Implementation of sectoral support provided under the protocol of the EU/Seychelles Fisheries Partnership Agreement

This section summarizes the issues that were raised as part of a performance audit evaluation of the implementation of the sectoral support provided for the years 2014 and 2015 under the 2014-2020 protocol of the EU/Seychelles Fisheries Partnership Agreement. The performance audit is very comprehensive and looks at the overall performance of the SFA rather than just the implementation of activities under the EU/Seychelles Fisheries Partnership Agreement.

4.3.1 Budget Execution 2014 - 2015

- (1) It was noted that budget from the protocol accounted for around 63% of funds available for spending by the SFA.
- (2) 64% of funds under the protocol for 2014/2015 were allocated to fisheries infrastructure projects. The amount of infrastructure projects which had to be implemented in the time frame was found to be too much and were putting enormous pressure on the Project Implementation Unit.
- (3) Only 24.5% of the funds were allocated to programme support and 11% to capacity building activities. This suggests that as a fisheries management organization, SFA is not putting enough emphasis on fisheries management and the building of core competencies of its staff. It is rather continuing to develop the fisheries sector without much consideration for the additional pressures that such developments can put on the resource base.

- (4) Budget execution has been low (55%), which prompted the EU not to release new funds on certain occasions until targeted execution level had been reached.
- (5) At the current rate of budget utilization, SFA stands to lose at least one whole year's budget contribution by mid- 2021.

4.3.2 Procurement process

- (6) There were no evidence that the contracts had been used to generate procurement plans and it appears that procurement was ad-hoc and was initiated when either the project management team or a manager alerted the Procurement Manager.
- (7) There are concerns from the Procurement Oversight Unit (POU) that SFA did not have the capacity to manage all the procurement related to the volume of projects it was managing. There are also concerns that the internal processes were such that the board may not always be informed of some of the key procurement decisions relating to major infrastructure projects. No evidence were found of a board committee that oversees major investment decisions within the SFA.

4.3.3 Governance

- (8) There is no systematic reporting from SFA to the Ministry of Fisheries and Agriculture.
- (9) SFA's Board of Directors is not adequately structured to assume all its fiduciary functions given the huge risks involved in some of these decisions and the need to ensure that the recommendations being made to improve controls and reduce risks are implemented.
- (10) The Board of Directors were not getting assurance that the proper procedures are being adhered to whether in relation to procurement or contract management.
- (11) Most of the executive functions in relation to the sectoral programme were being implemented by default by the Procurement Manager despite the fact that the Deputy Chief Executive Officer was the designated person for overseeing the implementation of the protocol.
- (12) There were concerns that the creation of a separate structure to oversee the EU sectoral support program. It was of the opinion of the audit that a separate structure will not assist SFA in strengthening its system and existing structures.
- (13) SFA is not consistent in the way it deals with various stakeholders, especially with regards to procedures for managing funds.

4.3.4 SFA's accounting system

- (14) There were no evidence of preparation of project accounts for expenses being incurred under the EU partnership agreement reconciliation from the Central Bank of Seychelles (CBS) and there were no independent cross-check of accuracy of information provided by the CBS. The audit pointed out that on certain occasions, it has resulted in misleading information being provided on the rate of utilization of the EU funds.
- (15) Processes for organizing, reorganizing and manipulating financial data were being done manually. The audit recommended that financial data pertaining to activities paid for under the protocol should be handled through a digitized system.
- (16) Project accounting was being undertaken by the Procurement Manager rather than the regular accounting staff, a practice which was found not follow good governance procedures with adequate segregation of procurement and accounting functions. The internal controls related to the management of the funds under the EU sectoral support programme were found to be inadequate.
- (17) Public funds transferred to third parties are not following the same public service rules for procurement and other government accountability rules.

4.3.5 Planning

- (18) There were no comprehensive, detailed annual plan of activities and the EU funds are seen as a separate budget rather than a source of funds to support SFA's activities.
- (19) There seems to be no strategic planning on what is required to be done to facilitate development of the fisheries sector as a whole.
- (20) There is a narrow focus on capacity needs of SFA rather than the needs for developing the sector.
- (21) There is as yet not a Strategic Plan for SFA in place.

4.3.6 Reporting

- (22) Annual reports and financial audits were not being completed on time in contravention to the SFA (Establishment) Act of 1984 which requires the SFA to present annual reports and audited accounts in front of the National Assembly by March of the following year.
- (23) The SFA annual reports does not adequately reflect all the work undertaken by the SFA. The audit report points out that the annual report only reports on budgeted funds provided by government and does not indicate the value of projects and therefore funding provided by non-government sources such as EU, JICA, etc.
- (24) SFA annual report does not report on substantial revenue that it collects through the provision of MCS services.

4.3.7 Project related deliverables

- (25) The SFA Economics Unit is not adequately staffed and there is no capacity to undertake economic and financial analysis of the Seychelles fisheries value chain and the tuna value chain.
- (26) The Fisheries Management Unit is not adequately staffed to deliver all the fisheries management functions of the SFA and of the country. The audit report highlights that the section presently have only three staff who are working on both industrial and artisanal fisheries. The report went further to note that *Seychelles is reputed to be a leader in fisheries management in the region and yet there is only one fisheries scientist at the SFA and there is no tuna scientist, our biggest export.*
- (27) There are major delays in the preparation of SFA's annual reports and the financial audits due to a backlog created under previous managements and lack of a plan to clear the backlog.
- (28) The Monitoring and Control Surveillance (MCS) staff within SFA had no experience working with the Electronic Reporting System (ERS) software and were not able to properly evaluate the requirements for installing and operating such a system.
- (29) There is a lack of qualified scientific staff at SFA to undertake research on the major scientific issues for which data are required for fisheries management.
- (30) Appropriate amount of air patrols were not being undertaken due to delays in making payment to the Seychelles Air force. The report specifically noted that in 2014/2015, SFA took 3 months to do the formalities to transfer funds into the Seychelles Air Force account.
- (31) In 2015, national sea patrols were cancelled by the SFA Board of Directors for unclear reasons while air patrols were allowed to continue. Staff indicated that air patrols are ineffective if not accompanied by sea patrols.
- (32) Coastal national sea patrols implemented are far below target due to high reliance on the use of the Seychelles Coast Guard (SCG) and National Drug Enforcement Agency (NDEA) boat. Recommendations were made for SFA to procure its own coastal patrol boat.
- (33) Target for the inspection of Seychelles flagged vessels compliance were being met, however no information is given on the level of compliance recorded.
- (34) The Fisheries Monitoring Centre does not have enough staff to do all the installation and repair of VMS units on semi-industrial and artisanal fishing vessels.
- (35) Installation of utilities and road transport infrastructure on Isle du Port remains outstanding and limits the volume of activities taking place at the quay. This is an issue despite the fact that a contract for project management services has been signed with Gibbs since 2014.
- (36) The insurance scheme for artisanal fisheries vessels does not appear to be popular with boat owners and to date there are only 30 boat owners out of a possible 340 or more making use of the insurance scheme. The audit points out that nothing is being done by SFA and the insurance companies to promote the scheme and its benefits.

4.3.8 General conclusion

- (1) Recommendations made in the Performance Audit of the 2011-2013 Protocol period concerning processes that SFA needs to put in place to improve planning and increase efficiency remained largely unimplemented.
- (2) For the amount of funds involved, oversight of the European Union Sectoral support programme was not robust.
- (3) Failure of the procurement and project management process were responsible for delays that were plaguing the implementation of Infrastructure projects.
- (4) Internal controls related to management of EU funds were inadequate.
- (5) Gaps in technical capacity continue to remain unaddressed within the SFA and is affecting the ability of the SFA to deliver on its mandate and to manage the EU sectoral funds.

4.3.9 Major recommendations

The performance audit report made the following major recommendations:

- (1) It is recommend that SFA prepares a plan of action for the implementation of recommendations of all past audits including the recommendations and resolutions of the JCMs which relate to management of the EU sectoral support.
- (2) SFA should develop a Strategic Plan to improve planning and prioritization of activities.
- (3) SFA's management should develop a clear framework for management of the funds from the EU sectoral support.
- (4) The Deputy Chief Executive Officer is designated as the Focal Person with oversight responsibility for the EU Sectoral Programme.
- (5) An analyst should be recruited with principal duties of undertaking monitoring and evaluation of project activities funded across SFA's budgets and to support the implementation of a strategic plan.
- (6) There should be proper segregation of the procurement and accounting functions.
- (7) A person is recruited to fill the post of Port Administrator and allow the Project Manager to focus solely on his project management responsibilities.
- (8) Clear rules of engagement should be establish for implementation of project activities by third parties. These third parties should ensure that the use of public funds is in line with current accepted procedures within the public service.
- (9) SFA should consider contracting out project management of large infrastructure projects given the shortage of infrastructure project management skills within the organization.
- (10) The services of a legal adviser should be retained by SFA to assist with contract management.

- (11) In order to exercise oversight, the board must be adequately structured to ensure it carries out all its fiduciary duties. For good governance, we recommend structuring the board into board committees with clear terms of reference that will report to the main board, made up of board members supported by SFA staff as follows:
- (a) **Investment Committee** – to review investments and procurement decisions;
 - (b) **Capacity Development/Human Resource Development Committee** – for oversight of capacity building decisions
 - (c) **Audit Committee** – to review audit reports and assess internal controls at the SFA
- (12) A post of **Internal Auditor** should be created. The role of the internal auditor is to audit the various processes to ensure that they are being implemented in accordance with public service rules and to give the board comfort that the proper internal controls are in place.
- (13) Ministry of Agriculture and Fisheries should consider having a Human Resource Development focal person at the Ministry in order to oversee capacity development issues of the entire fisheries sector.
- (14) The objectives of the Fisheries Development Fund should be reviewed.
- (15) A communication or public relations person should be recruited to increase the visibility of SFA and increase awareness of opportunities in the fisheries sector.

4.4 SFA's performance against FAO's Code of Conduct for Responsible Fisheries

The Performance of SFA and the Seychelles was assessed against the requirements of the FAO's Code of Conduct for Responsible Fisheries. Only the articles (6 to 12) targeted for country level implementation were considered. To improve comparability of performance in relation to the different articles of the code, the same scoring system used to assess SFA's performance in relation to the implementation of the Seychelles Fisheries Policy (2005) was employed. Assessment of the implementation of each component of a sub-article was ranked in five categories (poor, fair, average, good, very good) with each category given a numerical score with poor = 0, fair = 1, average = 2, good = 3, very good = 4. Detail of each article, sub-article and their specific components of the Code of Conduct can be found in Annex I along with the scores that was assigned based on the implementation of each component and justification for the scores. The scores assigned are based on different sources of information that was obtained throughout the implementation of the assignment from policies, legislations, reports, interviews and the consultant's knowledge of the sector. As a result the scoring can be subjective and should be considered with caution.

Figure 4 summarizes the results across the 7 articles assessed, whereas Figure 5, provide greater details on the implementation of the individual components of each sub-article. The error bars on Figure 3 represents the standard deviation of the scores assigned to each component of a sub-article. In summary, Figure 2 suggests that performance has been highest on issues that are mostly handled by the private sector and those that have to do with trade, regulations and operations in the fisheries sector. Components dealing with aquaculture development also scored highly as a result of the fact that SFA and the MFA has put a lot of emphasis of proper planning of the mariculture sector before its official launching. As part of this process the SFA has prepared a Mariculture Master Plan, Mariculture Policy and have prepared draft regulations to regulate the sector thus allowing for a more orderly development. Performance regarding the implementation of articles to do with institutional related issues such as fisheries management, fisheries research and integration of fisheries into coastal area management scored less. This is most probably due to the case of these components being more complex to implement, being reliant on high level of technical capacity and budget from government. For more details refer to Annex I.

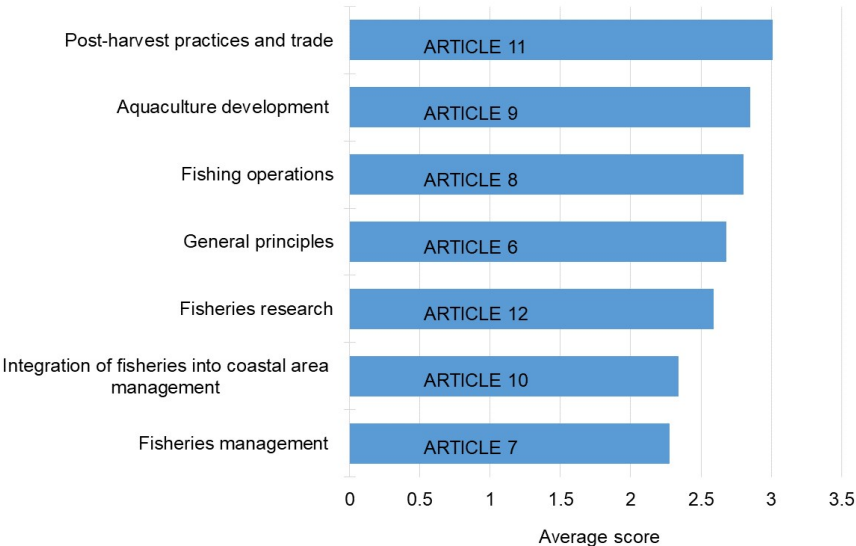


Fig. 4. Average score of SFA and Seychelles performance regarding the implementation of the articles of FAO’s Code of Conduct for Responsible Fisheries.

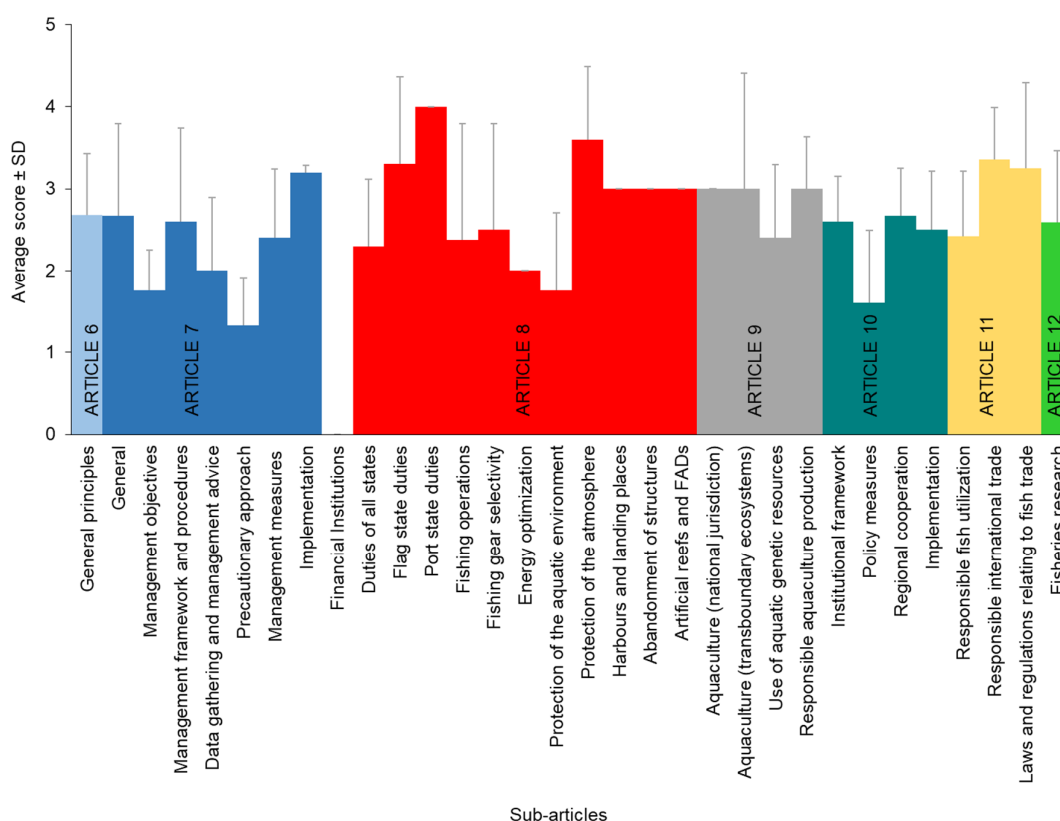


Fig. 5. Average score with standard deviation of SFA and Seychelles performance regarding the implementation of the sub-articles of FAO's Code of Conduct for Responsible Fisheries.

5. Institutional Diagnostic Analysis

A number of tools were used as part of the SFA institutional diagnostic analysis to identify priority issues for which new strategies for tackling them have to be developed as part SFA's new Strategic Plan. The tools used include:

1. A Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis, which is a framework used by organizations to identify risks from internal and external environments and the positive attributes of the organization and the external environment that can be used to mitigate the risks.
2. A Political, Economic, Social, Technological, Environmental and Legal (PESTEL) analysis, a tool used to identify external factors that could positively or negatively on an organization.
3. A Senior Managers satisfaction survey which looks at the level of satisfaction of senior managers with the working conditions offered by SFA.
4. An diagnostic analysis of the performance of different SFA's division, to identify constraints (space, human, capacity, legal, etc..) that affects the performance of their work.

5.1 SWOT Analysis

The SWOT analysis was done in a workshop environment with the senior managers of SFA. The findings are discussed in details in order to provide more context to the situations.



Strengths

- (1) **Managing an economic pillar:** Fisheries is the second most important sector in Seychelles economy after tourism. The fact that SFA is managing one of the main pillar of the economy give it substantial advantage when seeking funds and support from government for institutional improvement and organization of the fisheries sector to ensure resource sustainability.
- (2) **Financial means for programme implementation:** As part of the sectoral policy support funds of the EU/Seychelles Fisheries Protocols under the Fisheries Partnership Agreement the Seychelles Fishing Authority gets an annual budget of Euro 2.5 million. This fund is used by SFA to support its various operational programmes. Essentially, this fund supplements SFA's budget from Government. This extra fund has enables SFA to do much more work on the ground and support the development of fisheries in ways that it would have otherwise not been able to (e.g. supporting fishers associations, infrastructure development on zone 14, construction of facilities for fishermen).

- (3) **Ability to generate support and funding:** As the work of SFA is to support such an important component of the country's economy, it can get support from government, multilateral and bilateral donors with relative ease to support project implementation.
- (4) **Have assets that can generate revenue:** SFA has a number of assets that can be used to generate extra revenue for its operation. Some examples include the fish processing plants at Providence and Bel Ombre, ice making machines, fishing quays, warehouse, research vessel, laboratories and equipment which can be rented out or charged for their use. These assets can bring in a substantial amount of additional revenues for SFA.
- (5) **Funding for capacity building:** Through the sectoral policy support funds of the EU/Seychelles Fisheries Protocols under the Fisheries Partnership Agreement, SFA has the leeway to dedicate a substantial portion of the funds for capacity building purposes. Such funds can be used to provide targeted training and build core competencies that SFA requires to improve its service delivery. This is a strength that very few companies in the government sector has.
- (6) **Specialized human resources:** A number of experienced professional works at SFA in specialist fields such as fisheries research and management, fisheries statistics, fisheries economics, monitoring control and surveillance, etc. These specialized human resources are a great asset to the organization. As a result of their extensive knowledge of the sector, the staff are able to make informed decision and train new recruits when they start a career with the organization.
- (7) **Staff loyalty:** SFA has a large number of staff who has been with the organization for more than a decade. Most of these staff are dedicated to their work and believe it the work that SFA is doing. Staff loyalty often indicates that staff are committed, have had opportunity for professional development, and are performing to the required level. Staff loyalty is also important as it is the staff that are the purveyors of an organization's institutional knowledge.
- (8) **Internationally known:** SFA is a fisheries management organization which is well known internationally. This positive image is important in building the confidence of partners and donors and can be used to further develop new partnerships, train its staff and to secure funding from bilateral and multilateral donors to support fisheries improvement projects.
- (9) **Longevity:** SFA has been in existence for more than three decades and is well known both locally and internationally. During its existence it has gained a lot of experience as an organization, have created partnerships, have tried different ways of doing things and have navigated its ways through the complex politics involved with fisheries management.

Weaknesses

- (1) **Unstable leadership:** This has been one of the main weaknesses of SFA. In the past six years SFA has had five different CEOs and have worked under three different ministers responsible for fisheries. Instability in leadership can often create doubts in the minds of staff and stakeholders, can cause loss of strategic focus and create gaps in programme implementation.
- (2) **Lack of a strategic plan and clear priorities:** SFA has not formally established the direction that it wants to go through strategic planning. The organization has never had an operational strategic plan, there are no updated sector plans and the sections do not have section plans. The lack of planning documents have made it difficult for SFA to prioritize its actions, funding and human resources, which have undermined the effectiveness of the organization.
- (3) **Low risk management capacity:** SFA has not implemented any formal kind of Enterprise Risk Management. This has affected its ability to manage the risks that threatens the attainment of its mandates and vision. Risk management should be across a range of areas including financial, strategic, operational, reputational and compliance risks.
- (4) **Low staff capacity and focus on capacity needs:** A substantial amount of funds from the sectoral support under the protocol of the EU/Seychelles Fisheries Partnership Agreement has been dedicated for capacity building over the years. However, SFA still find itself in a situation with serious gaps in human capacity. A top-down, targeted capacity building programme needs to be implemented.
- (5) **Unclear KPIs:** SFA has not established relevant Key Performance Indicators (KPIs) for its sections, programmes and staff. KPIs provide a way to measure how well the organization, its programmes and staff are performing in relation to its goals and objectives. They are hence important to improve focus, service delivery and organizational productivity and can be used as a mean to quantitatively measure performance across the organization.
- (6) **Difficulty to attract and retain qualified staff:** As a result of its administrative and salary structure, as well as the recruitment approach used, the SFA has found it difficult to attract and retain qualified staff.

- (7) **Underutilization of data for fisheries management:** As a result of a lack of statisticians and economists to analyze data from the fisheries, SFA has not been able to make full utilization of the data which it is collecting.
- (8) **No standard in place for service delivery:** SFA is responsible for dealing with queries and concerns from its staff and other stakeholders. However, there are no clear standard in place with respect to the timeline within which these queries and concerns should be addressed thus leading to frustrations and complaints.
- (9) **Taking on increasingly new duties:** Due to the broad wording used in defining mandate No.1. of SFA, the organization has taken on a number of new resource intensive duties over the years such as the management of the fuel incentive scheme and the production of ice at a number of new sites. These new mandates have digressed SFA from its core duties of managing the fisheries.
- (10) **Inability to use sectoral funds for institutional infrastructure:** Despite the fact that SFA dedicates a lot of funds annually from the sectoral policy support funds of the EU/Seychelles Fisheries Protocols under the Fisheries Partnership Agreement to construct or maintain fisheries infrastructure it cannot use any of those funds to construct or repair institutional infrastructure such as office building. As a result of the expansion of the SFA workforce since its creation, the main office building has become too small to host the staff and there is overcrowding.

Opportunities

- (1) **Get on the Blue Economy band wagon:** SFA should make use of new interest generated by the *Blue Economy* concept to focus attention to the issues that Seychelles fisheries and SFA is facing. New interest can be used as a rationale for institutional strengthening and to reform fisheries management with the aim of ensuring sustainability.
- (2) **Take full control of sector planning and development:** With the absence of an SFA's Strategic Plan and a Fisheries Sector Development Plan from the Ministry of Fisheries and Agriculture, government does have a coordinated approach to development in the fisheries sector. The preparation and implementation of an SFA Strategic Plan and a Fisheries Sector Development Plan provides opportunities for SFA to take full control of planning and development happening in the fisheries sector.
- (3) **Develop fisheries to become the No. 1 economic activity:** With improved planning and increase activity in the fisheries sector, fisheries can become the most important economic activity in the

Seychelles. There have been years that revenue from fisheries has surpassed that from tourism but it has not been consistent.

- (4) **Improve image and visibility:** By rebranding itself into an organization with better planning, clear priorities, efficient service delivery and with strong emphasis on sustainable resource management, SFA can greatly improve its image and visibility and gain more respect from its stakeholders.
- (5) **Use of revenue generated for institutional development:** By implementing a cost-recovery approach for the services that is presently being offered for free by the SFA, the organization can increase revenue generation and make use of this new source of fund for institutional development (e.g. building new infrastructure, training, research, MCS).
- (6) **Attract and retain qualified staff:** Through more financial and administrative autonomy, better planning, re-branding and targeted recruitment SFA should be in a position to attract and retain qualified staff into the fisheries sector.
- (7) **Strengthen fisheries management & engagement:** Article 5(1) of the Fisheries Act (2014) call on the SFA *to prepare and keep under review a plan for management of a fishery* and provides the legal framework for all fisheries to be managed through a management plan. Article 5(3) of the same act requires the SFA to consult stakeholders in the fishing industry in the preparation and review of fishery management plans.
- (8) **Cost recovery/Reduce cost of operation:** By charging for the various services that SFA offers, there are opportunities to reduce SFA's cost of operation.
- (9) **Strengthen legal framework:** A revision of the Fisheries Act (2014) will remove short coming which have been identified in this Act and will improve its integrity. Modernization of the Fisheries Regulations (1987) is required to align it with the more modern Fisheries Act and FAO's Code of Conduct for Responsible Fisheries.
- (10) **Technology improve data collection, analysis, dissemination:** With the development of new platforms such as CyberTracker it is possible to improve quality control of fisheries data. New open source analytical software such as *R* makes it possible to automate data analysis and production of charts, graphs and tables thus making it easier to prepare reports.

Threats

- (1) **Lack of financial and administrative autonomy:** The lack of administrative and financial autonomy means that SFA is restricted on salaries that it can offer to attract and retain quality staff.
- (2) **Poor visibility:** SFA is implementing a lot of very useful and interesting programmes and initiatives, but because it does not have a staff responsible for public relations these activities are often not advertised and remains unknown to the majority of the Seychellois public.
- (3) **Lack of recognition of fisheries sector at national level:** Though the fisheries sector is the second pillar of Seychelles economy after tourism, it has not been given the level of attention that tourism had been given by government.
- (4) **No clear operational boundaries between Board, Ministry:** Though the SFA has a Board Charter which details the duties and responsibilities of board members and the interaction between the Board and the Minister responsible for Fisheries there remain uncertainties.
- (5) **Deviation from core mandates (fisheries management):** Despite the fact that SFA is considered to be a fisheries management organization, there is little active fisheries management being undertaken at the local scale. This is due to a lack of staff working on fisheries management and a lack of coordination between various sections.
- (6) **SFA's mandate too broad (need to be more specific):** The way that SFA's mandates, especially mandate (a), are written in the SFA Establishment Act (1984) is too broad and transfers a lot of responsibilities for the fisheries sector to SFA. This has resulted in a loss of focus on priority issues by SFA.
- (7) **Parts of sector highly dependent:** Even though fishing operations are businesses, part of the sector remains very dependent on government, especially in terms of subsidies. High level of subsidies has greatly increased the cost of operation of SFA and are not sustainable.

5.2 PESTEL Analysis

External issues that can affect the performance of SFA and implementation of this Strategic Plan has been grouped in six broad categories which are political, economic, social, technological, environmental and legal in nature. The main issues are identified and expected impacts highlighted. These issues are addressed through priority actions identified as part of each strategy.

	Issues - Unstable leadership with continued frequent changes of SFA's CEO and Minister responsible for Fisheries. - Change in Government during next Presidential election. - Creation of separate authority and agency one doing fisheries management and the other fisheries development. - New international requirements in terms of reporting, control, surveillance, data collection, etc. - Increase lobbying and activism by the Seychellois, international public and fishing boat owners.	Expected impacts - Halting of progress being made in certain areas, demoralization of staff, loss of continuity and institutional knowledge. - Possible changes in fisheries policy and Minister for fisheries. - Need to share resources between new organizations and possibility for conflicts arising from different overall objectives. - Increase pressure on workforce with need to further increase number of staff and budget - Deviation from core duties, change in policy, negative perception of SFA.	Nature of impacts = Mixed
	Issues - Budget cut from Government to SFA. - Frameworks are established to increase cost recovery for services offered by SFA. - Additional resources are made available to recruit additional staff in key positions. - Government give SFA financial autonomy over its operations. - Reduction of funds allocation to SFA under the next Fisheries partnership agreement with EU.	Expected impacts - Reduced administrative efficiency of SFA. - SFA is able to collect more revenue from industry to fund its activities and support to the fisheries sector. - Improve service delivery and achievement of organizational goals and targets. - Institutional strengthening and ability to attract and retain qualified staff. - Reduction in the number of fisheries support and management initiatives funded by SFA.	Nature of impacts = Mixed

 Social	Issues - Drug and social problems causing a reduction in the effective workforce - Restart of piracy in the Western Indian Ocean - Negative perception of SFA by members of the public due to a lack of information - Higher public expectation on service delivery by SFA - Attempt to manipulate SFA by fishers and other actors in the fisheries sector.	Expected impacts - Lack of human resources to fill necessary openings at SFA. - Shift in SFA focus from fisheries management to security. - Possible change in leadership to respond to public perception and reduced attractiveness of SFA. - Improved service delivery and justification for additional budget. - Possible loss of control of the sector and inadequate focus on sector priorities.	Nature of impacts = Mostly -
 Technological	Issues - Introduction of new technology for data collection, analysis and dissemination. - Integrated database and central repository for all SFA data. - Improvement of technology for fisheries research, stock assessment and prospecting.	Expected impacts - Improve efficiency in data capture, analysis, quality control and reduction in the cost of operation. - Facilitate access to information and decision making - Strengthen fisheries management and identification of new fisheries resources.	Nature of impacts = Mostly +
 Environmental	Issues - Climate change could lead to more abnormal environmental events and increase variability in species biology and stock sizes. - Natural disasters leading to damage of SFA and fisheries infrastructure and increase in operational risks. - Pressures from environmental groups to reduce environmental impacts of fisheries.	Expected impacts - Negative impact on the yield of fisheries resources and increase pressure on SFA to ensure resource sustainability. - Damage to SFA infrastructure and increase cost of operation. - Help SFA to strengthen fisheries management and improve transparency in decision making.	Nature of impacts = Mixed
 Legal	Issues - Fisheries Act (2014) not reviewed and updated to address various short falls identified through past reviews. - SFA Establishment Act (1984) not reviewed to redefine mandates and procedures for selection of Board of Directors - Others Acts and policies affecting fisheries sector not aligned to fisheries management objectives. - Increase in the number of judiciary cases resulting from implementation of new regulations - Increase in number of IUU incidents	Expected impacts - Difficulty in ensuring compliance to fisheries regulations, and difficulty in domesticating RFMO resolutions. - SFA overwhelmed by too much to do and a lack of strategic leadership from suboptimal identification of members on the Board of Directors. - Difficulty in ensuring appropriate fisheries management and resource sustainability. - Increase pressure on SFA's legal team loss of focus on priorities. - Increase pressure from Government, RFMOS and licensed operators to increase surveillance.	Nature of impacts = Mostly -

5.3 Senior Managers satisfaction survey

This section summarizes the results of an employee satisfaction survey undertaken with Senior Managers at the SFA. Only Senior Managers were targeted as they are the SFA staff who will be responsible for overseeing the implementation of the SFA Strategic Plan at section level. The questionnaire used is available in Annex II.

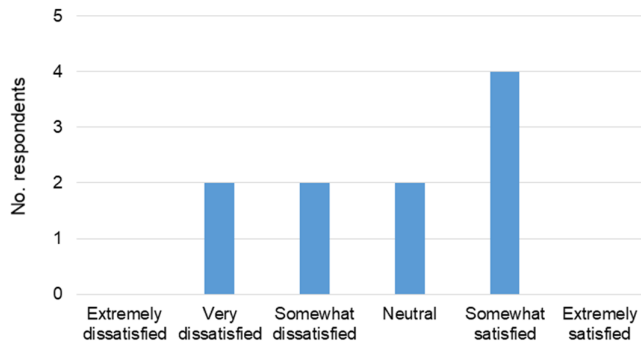


Fig 6. Level of satisfaction of SFA Senior Managers in working at SFA

The level of satisfaction in working at SFA was mixed (Fig. 6). Forty percent of respondents claimed that they were *somewhat satisfied*, while 20% claimed that they were *very dissatisfied*, and 20% claimed that they were *somewhat dissatisfied* with the remaining 20% of respondents providing a neutral response. Overall, the staff claimed that the opportunities they are given for training and development is what they like most about working at SFA.

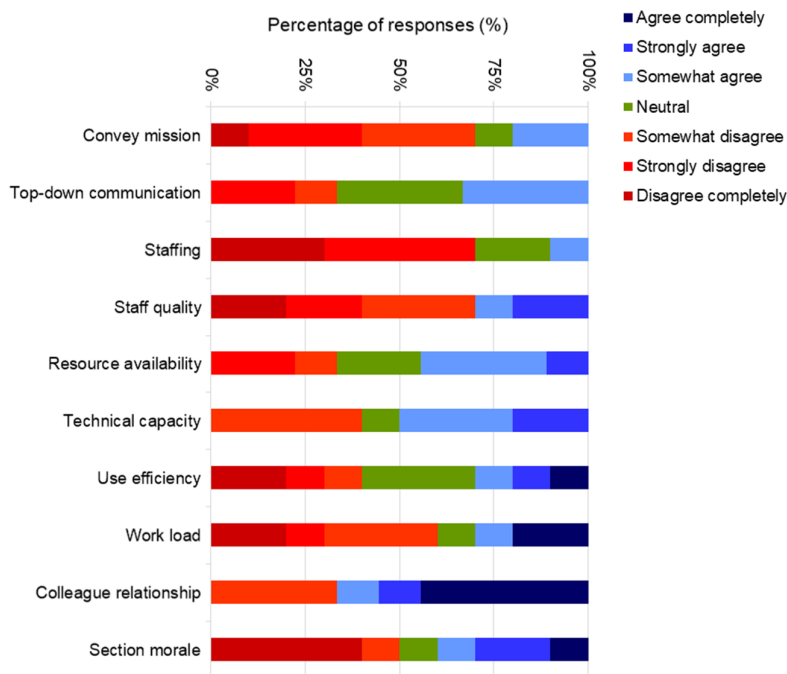


Fig. 7. Response of Senior Managers on Level of satisfaction of SFA Senior Managers in working at SFA

The majority of staff had a mostly negative view, when asked (i) whether they felt SFA was clearly conveying its mission to its employees, and (ii) whether they have the right quantity and quality of staff to do their job (Fig. 7). There was a bit more balance in staff response on the level of communication from managers to employees, availability of resources to work with, and whether they have the right technical capacity to do their job. The views were more extreme and polarized to questions about whether they felt that they were being underutilized in their job and on their work load. The responses indicate that there are some senior managers who feels underutilized

with insufficient workloads and some who feels over worked with too much to do. Results suggest that in

certain sections staff morale are extremely high whereas in other they are extremely low. Most respondents took a positive view on the ease of getting along with their work colleagues.

When asked about their working relationship with their supervisors, which in many cases was the CEO , the respondents were mostly positive. Most of them was of the opinion, that their supervisor was doing a good job, was promoting an atmosphere of teamwork, providing actionable suggestions on what can be done to improve things and were addressing concern that they have (Fig. 8(a)).

There was high level of dissatisfaction in response to questions based on manager’s satisfaction with their salary, the benefits offered by SFA and the process used to determine pay rise (Fig. 8(b)). More mixed and balanced views were obtained in response to question about career progression at SFA with most of the staff taking more neutral views but with some having extreme negative while others had extreme positive views. In contrast, the majority of respondents had positive levels of satisfaction about the opportunities that they have been offered by SFA.

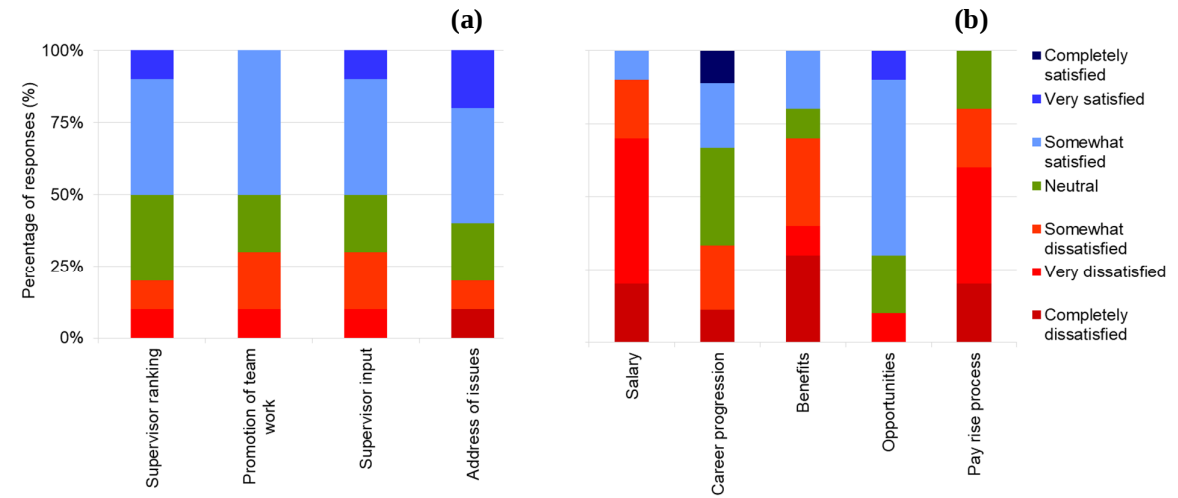


Fig. 8. Response of Senior Managers on Level of satisfaction of SFA Senior Managers in working at SFA.

Forty percent of respondents claimed that they did not have a well-articulated work plan with clear outputs and indicators. Though, it is believed that this is an under-representation and most sections do not actually have a work plan, since none of the managers were able to provide a copy of their plan. The respondents were of the opinion that the lack of availability of section work plans was due to the fact that the organization did not actively request the preparation of work plans and that there is no vision in place to guide the work plan.

There was high level of support (90%) in favour of SFA developing Key Performance Indicators to evaluate the performance of its sections, managers, staff and programmes. When asked about the limitations or issues that can be foreseen with the KPIs, the range of responses was quite varied and included issues such

as generating additional workloads, staff continuing to work without their KPIs in mind, the required resources not being available for staff to meet their KPIs, and issues related to multiple sections contributing to the same KPIs. In general, it appears that there is mixed feeling on satisfaction of working at SFA with some senior managers feeling generally positive and engage while others feel disenfranchised.

5.4 Analysis of SFA structure, institutional capacity and service delivery

This section provides an overview of the work undertaken by the different divisions within SFA. It describes the current status and main issues affecting performance and makes recommendations on measures that could be implemented to improve performance and efficiency. Many of the issues regarding SFA's structure, institutional capacity, service delivery and the financial and administrative system were dealt with as part of the performance audit evaluation of the implementation of the sectoral support provided for the years 2014 and 2015 under the 2014-2020 protocol of the EU/Seychelles Fisheries Partnership Agreement and are summarized under section 1.4.

Generally, it was found that many divisions have a lack of qualified staff to undertake the work that is required. Office space is a major issue with some sections having cramped offices with little space to move. The staff of the divisions have experience in fisheries, what most division now requires are people that can oversee the implementation of the different division's work plan, which was mainly absent.

	Main responsibilities	Diagnosis	Recommendations
FISHERIES MANAGEMENT DIVISION	The division is responsible for: (a) Management of fisheries resources according to internationally recognized best practices. (b) Formulation of policy papers concerning fisheries management (c) Development fisheries management plans. (d) Implementation of the scientific observer programme on industrial fishing vessels.	- The section is severely understaffed with only four staff members. - There is little in place in terms of active fisheries management.	- The Fisheries Management Division should become the core division of SFA and should establish clear link of reporting with other divisions to ensure that all initiatives are in line with sustainable management of fisheries resources. - If SFA is to put resource sustainability at the center of its operation, this division needs to be strengthened. More staff needs to be employed to coordinate the development and implementation of management plans for the different fisheries and to assess the effectiveness of management measures. - Since the section already have two fisheries scientists, extra staff capacity does not necessarily need to be in the form of additional fisheries scientists. Hiring good project managers is a preferred option. - As the industrial tuna fishery is economically the most important fishery, the expertise of staff in this division should be develop to understand the industrial fisheries and to work with international scientists, statisticians and staff of IOTC and other states on tuna fisheries related issues.
FISHERIES ECONOMIC AND INFORMATION DIVISION	The division is responsible for: (a) Collection of fisheries data through surveys. (b) Collection and analysis of economic data about the Seychelles fisheries. (c) Input fisheries data into the SFA databases. (d) Management of SFA's data and publication of statistical bulletins and technical reports summarizing data from various fisheries. (e) Management of the fuel incentive scheme.	- The division lacks technical staff and have only two economists and two statisticians. - One of the economists is on a long-term overseas PhD training. - While there is a substantial amount of data on fisheries catch, fisheries exports and imports, there is much less data on other financial aspects of the fisheries and fish processing. - Lack of financial data undermines the decision making process, especially in relation to resource rent. - Number of field enumerators is considered to be adequate. - The fuel claim unit is considered to be over-staffed and currently have more staff than the entire Finance section of SFA.	- There is a need to employ more economists and statisticians to collect and analyze data across the entire fisheries sector. - More emphasis should be placed on collecting economic, financial and social data across the fisheries sector. - There is a need to simplify the fuel claim scheme to make it less labour intensive and easier to administer. - While the number of field enumerators is considered to be appropriate, there is a need to better organize their working schedule so that they can adequately sample during periods when most catch are being landed. - The division should take the responsibility of monitoring the catch of yellowfin tuna (<i>Thunnus albacares</i>) as part of the quota system imposed by IOTC resolution 17/01 and for communicating to the Fisheries Management Division when individual quotas are reached.

FISHERIES RESEARCH DIVISION	The division is responsible for: (a) Undertaking fisheries and oceanographic research. (b) Prospecting for new fisheries resources. (c) Testing new gears and fishing techniques. (d) Operating the SFA Research vessel.	- The section has 4 fisheries scientists and 6 fisheries technicians and have a crew of 5 person who operates the R/V Amitié. - The division is undertaking a number of highly pertinent research projects with strong management implications. - The division collaborates strongly with local associations and NGOs as well as international research organizations such as the Institut de Recherche pour le Développement (IRD) with whom they have a partnership starting from 1984 during the start of the Industrial tuna fishing. - The division has most of the funding and equipment that are required for their work. - The most pertinent weakness of the division is the research capacity of the scientific staff.	- A long-term research plan should be prepared based on the priorities outlined in resource management plans and as part of other management frameworks. - There is a need to integrate stock assessments of various targeted species within the core duties of the research division and for them to coordinate data collection for these assessments with the Statistics management section. - More opportunities should be offered by SFA to join the organization as research scientist. - Collaborations and partnership should be encouraged with UniSey and international universities and research institutions to increase the amount of fisheries research undertaken and knowledge about Seychelles fisheries. Collaboration should be encouraged of all scientific fields related to fisheries and not just fisheries ecology. - SFA should focus on improving the technical capacity of staff working in this division through provision of opportunities to undertake higher research degrees (MPhil, MRes, PhD). With these research degrees, SFA's research scientists will be able to take the lead on the design, implementation and publication of their own research work. - Incentives should be put in place to encourage research staff to publish their work in peer-reviewed journals and to compensate them for publishing.
MONITORING CONTROL AND SURVEILLANCE DIVISION	The division is responsible for: (a) Ensuring compliance of all fishing vessels to the reporting requirements. (b) Management of the Vessel Monitoring System (VMS). (c) Validation of statistical documents for ICCAT, IOTC, EU and Non-EU catch certificates. (d) Processing and issuing of fishing licenses. (e) Carrying out inspectorate duties with regards to port state inspection, land inspection, sea and air surveillance duties pertaining to national and regional requirements.	- Fisheries Monitoring Centre (FMC) and Enforcement section are considered to be understaffed while the Fisheries Control Unit is considered to be adequately staffed. - The Division is in urgent need of more office space. - More staff are required to deal with issues of reporting and compliance and for dealing with the Electronic Reporting System (ERS). - The number of on sea patrol is still very low and needs to be increased as many of the fisheries infringements are difficult to detect using land based monitoring.	- More staff needs to be employed to increase the number of personnel dedicated to enforcement and compliance monitoring, especially on industrial fishing vessels, and for port state inspection so that performance can be brought in line with the requirements of the FAO Port State Measure (PSM) and the IOTC PSM resolution. - At least two new offices should be assigned to this Division to improve the cramped working condition which is the status quo. - There is a need to keep the list of licensed fishing boats current and to ensure that all boats benefiting from SFA's incentives are registered and licensed to fish and that they provide all of the information that are required to SFA. - The Fisheries Control Unit should work closely with the consultants developing the new licensing framework for the artisanal fishery so that a proper framework is developed for keeping track of boat registration, ownership, benefits and infringements.

HUMAN RESOURCES AND ADMINISTRATION DIVISION	The division is responsible for: (a) Identification of human resource needs of the organization. (b) Identification and facilitation of training and capacity building. (c) Evaluation of staff performance against given duties. (d) Providing administrative guidance and support to the organization and staff. (e) Hiring and termination of staff. (f) Dealing with employment, benefits and disciplinary issues.	- The division does not have an official head and is lacking in direction and organization. - The system for dealing with staff file is messy and cumbersome. - All applications (e.g. leave, time off, transport booking) is become done by hand. There is a need to automate part of the system. - Training undertaken continues to be driven from the bottom-up. - There is no clear standard for dealing with staff request and issues. - The division has difficulty in recruiting the most appropriate staff for SFA as a result of a lack of administrative autonomy.	- A new manager needs to be employed to head this division. - Clear guidelines needs to be introduced on how to deal with staff issues. This could be supported by an employee handbook, which documents the organization's operating procedures and policies. - The purchase and installation on the local area network of an integrated workplace administration system software is recommended to facilitate administrative issues (e.g. request for leave, transport, services, etc.). - A long-term training plan needs to be prepared with the aim of providing targeted training identified by the SFA leadership to close the technical gap that currently exist. - The organization should continue discussion with government to get greater administrative autonomy in the way that it operates.
FINANCE AND PROCUREMENT DIVISION	The division is responsible for: (a) Preparation on annual budgets, revenue and expenditure forecasts. (b) Managing the cash and bank accounts. (c) Payroll management. (d) Keeping track of the organizations assets. (e) Procuring of goods and services (f) Liaison with the Treasury and Department of Finance.	- The division appears to be adequately staffed. - Several important weaknesses on the accounting system and procurement process has been identified as part of the performance audit evaluation of the implementation of the sectoral support provided for the years 2014 and 2015 under the 2014-2020 protocol of the EU/Seychelles Fisheries Partnership Agreement. - There is a need to greatly improve financial risk management especially in relation to large infrastructure projects.	- The recommendations on accounting system and procurement process made as part of the performance audit evaluation of the implementation of the sectoral support provided for the years 2014 and 2015 under the 2014-2020 protocol of the EU/Seychelles Fisheries Partnership Agreement should be implemented in full.

CHIEF EXECUTIVE OFFICERS OFFICE	CEO and Deputy CEO Office Secretariat is responsible for: (a) Preparation on annual budgets, revenue and expenditure forecasts. Development and Assessment Unit is responsible for: (a) Development and promotion of seafood processing in Seychelles (b) Development of new seafood value added products. Aquaculture Unit is responsible for: (a) Development of the mariculture sector. Project Management Unit is responsible for: (a) Evaluation and approval of infrastructure projects in the fishing industry submitted to SFA. (b) Preparation of technical documents for SFA infrastructure projects. (c) Development of infrastructure in support of the fishing industry.	- The unit has adequate number of secretarial staff. Requires the assistance of a Technical Adviser to assist the CEO with change management and the setting up of an office for project management and performance evaluation to prioritize and streamline efforts, track progress and improve overall productivity and efficiency. - The unit is adequately staffed. Its main management challenge is to co-develop new products with industry that can be marketed effectively. - The Unit is currently adequately staff as the sector is still in a stage of infancy. It is developing the Mariculture Master Plan and Mariculture Sector Plan with the help of international consultants and hence is adequately supported technically. - The unit currently have 4 staff and requires additional manpower to keep up with the large number of infrastructure projects currently under SFA's portfolio.	- Recruit technical adviser to assist SFA with change management. - Set up an office for project management and performance evaluation. - Continue to work with serious operators to co-develop new products. - Make use of SFA's contact and network to get training for staff on the development of new value added fish products. - As the sector develops there will be a need to gradually increase the number of staff so as to adequately monitor and control development and provide scientific and technical support to the industry. - The Project Management needs to employ more technical staff while also investigating the possibility of contracting more of the technical work so that they can focus on project supervision, monitoring and evaluation.
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6. Discussion and Recommendations

In summary the reviews of the resource base, institutional set-up and performance of the SFA has indicated the following:

- o Most fisheries resources are being harvested at almost full capacity with certain stocks having already exceeded MSY limits. There is thus a need to focus the fisheries development paradigm from one looking at fisheries expansion to one which is focused on resource sustainability while improving the total socioeconomic outputs.
- o SFA has done relatively well in the delivery of its institutional mandates and in the implementation of the Seychelles Fisheries Policy (2005). There is however room for improvement and a need to review some of the mandates so that SFA can focus on the operational side of the fisheries dealing with proactive planning of the sector and ensuring that, the most important component of the fisheries, the resource base, is managed in a way that promotes resource sustainability.
- o SFA is currently lacking in capacity to implement its programmes and there is currently low level of budget execution. The main issue affecting budget execution appears to be a human resource one, with SFA not having the authority to employ new staff that it requires or not being able to attract and retain qualified staff.
- o There is a need to strengthen the governance structure of SFA, especially in relation to the structure of its Board of Directors, reporting to the Ministry of Fisheries and Agriculture, risk management, and the oversight of institutional performance, procurement and financial operations.
- o Substantial amount of funding are allocated each year for training and capacity building purposes but there remains a gap in the core competencies that SFA requires. It appears that training needs are being identified using a bottom-up approach while it should be the complete opposite.
- o There is currently too much focus on the development of fisheries infrastructure while little emphasis is being placed on the sustainable management on the resource base that makes fisheries possible. There is a need to ensure that development of fisheries infrastructure is done in tandem with the resource base and that new infrastructure contributes to local value addition and does not put excessive pressure on the already highly exploited fisheries resources.
- o Economic gains from the fisheries sector could be increased through development of the mariculture sector, value addition, reduction in subsidies and negotiation of better resource rent terms.

- o Efficiency could be improved across the whole organization through better use of technology, improved focus through the use of KPIs and having better performance indicators and performance evaluation and reporting in place.
- o Stability in the leadership position at the SFA's CEO level and at the level of the Minister responsible for fisheries is a serious concern and needs to be addressed to bring certain level of continuity and confidence in the work of the organization.
- o SFA has not been paying much attention to recommendations made in past evaluation and institutional diagnostic reports. These reports contain many pertinent recommendations that if implemented could have reduced the risks and improved the effectiveness, efficiency and sustainability of actions implemented by SFA.
- o Staff morale seems to be a major cause for concern. Some senior managers feels content and appreciated in the work that they are doing while there is a group that feels unappreciated and under used. Many of the divisions have problems with lower than optimal level of staffing and with office space that are overcrowded.

Overall, this institutional diagnostic analysis have highlighted the need for SFA to have a clear strategic plan and a performance evaluation system in place to guide the implementation of its activities and to optimize the allocation of resources. While the SFA has a number of very pertinent weaknesses and threats that could continue to undermine its operation and public image, the weaknesses, i.e. issues that is internal to the functioning of SFA and hence could be more easily dealt with, are of greater course of concern than external issues and can be adequately addressed by making use of the SFA's identified strengths and opportunities.

Access to funding provided under the sectoral policy support funds of the EU/Seychelles Fisheries Protocols under the Fisheries Partnership Agreement is a very important strengths that no other government organization have. Part of this fund can be used to support with the implementation of the SFA Strategic Plan (Volume 1), especially with the re-organization of the SFA finance and project management sections as recommended as part of the performance audit evaluation report of the implementation of the sectoral support provided for the years 2014 and 2015 under the 2014-2020 protocol of the EU/Seychelles Fisheries Partnership Agreement.

This diagnostic analysis showed that substantial allocations are made each year towards training and capacity building but that SFA remains with serious lack of competencies among its staff. This lack of competencies can be dealt with using mixed strategies. In the first instance, the SFA should put in place a new scheme of service to attract new qualified staff in the organization, retain existing qualified staff. A medium-term training plan should be prepared and implemented to fill in the gaps in competencies that are presently lacking. Identification

of gaps in core competencies should ideally come from the Division Managers and should be based on their long-term vision for their divisions and not necessarily their 3-year rolling section plan. To further summarize, the main issue with SFA seems to be that there is not enough planning taking place at the institutional and section level. This lack of planning points to a lack of guiding documents. If work planning is improved the effectiveness, efficiency and sustainability of activities implemented by SFA would greatly benefit.

The situational analysis has highlighted a number of pertinent issues that needs to be addressed as part of the new strategic plan that is to be prepared for the SFA. Each section of the report has provided specific recommendations on what can be done to address the main issues of concern. Here, recommendations are made on specific issues around which strategies can be developed in the proposed SFA Strategic Plan. Since the fisheries sector essentially has three main components: The fisheries resources, the management institution and the fishers, for reasons of simplicity it is recommended that SFA establishes three main strategic goals to address each of the main components identified above.

Goal 1 should focus on the *institutional strengthening of SFA* and should have strategies that addresses issues such as organizational planning, strategic management, service delivery, working conditions for staff, performance evaluation, financial, administrative and risk management capability, training and capacity building, improving institutional infrastructure and facilities, organizational image, visibility and awareness. The expected outcome is that SFA becomes a strong fisheries management organization that is able to provide good working conditions for its staff and can fully implemented its given mandates.

Goal 2 should focus on *ensuring the sustainability of fisheries resources* and should have strategies that addresses issues such as improving fisheries management, fisheries research, improving compliance, strengthening the legal framework and planning fisheries development that are in tandem with the status of the resource base. The expected outcome is that the development and management of the fisheries sector is done in a manner which ensures that the resource base remains sustainable.

Goal 3 should focus on *the economic and social aspects of fisheries* and should have strategies that addresses issues such as maintaining the competitiveness of Port Victoria, increasing revenue from fisheries, development of the mariculture sector and value addition, providing support to fishers and encouraging the local consumption of fisheries products. The expected outcome is that fisheries continues to contribute to the socio-economic development of the country.

This institutional diagnostic analysis is simplified in the form of a problem tree (Figure. 9).

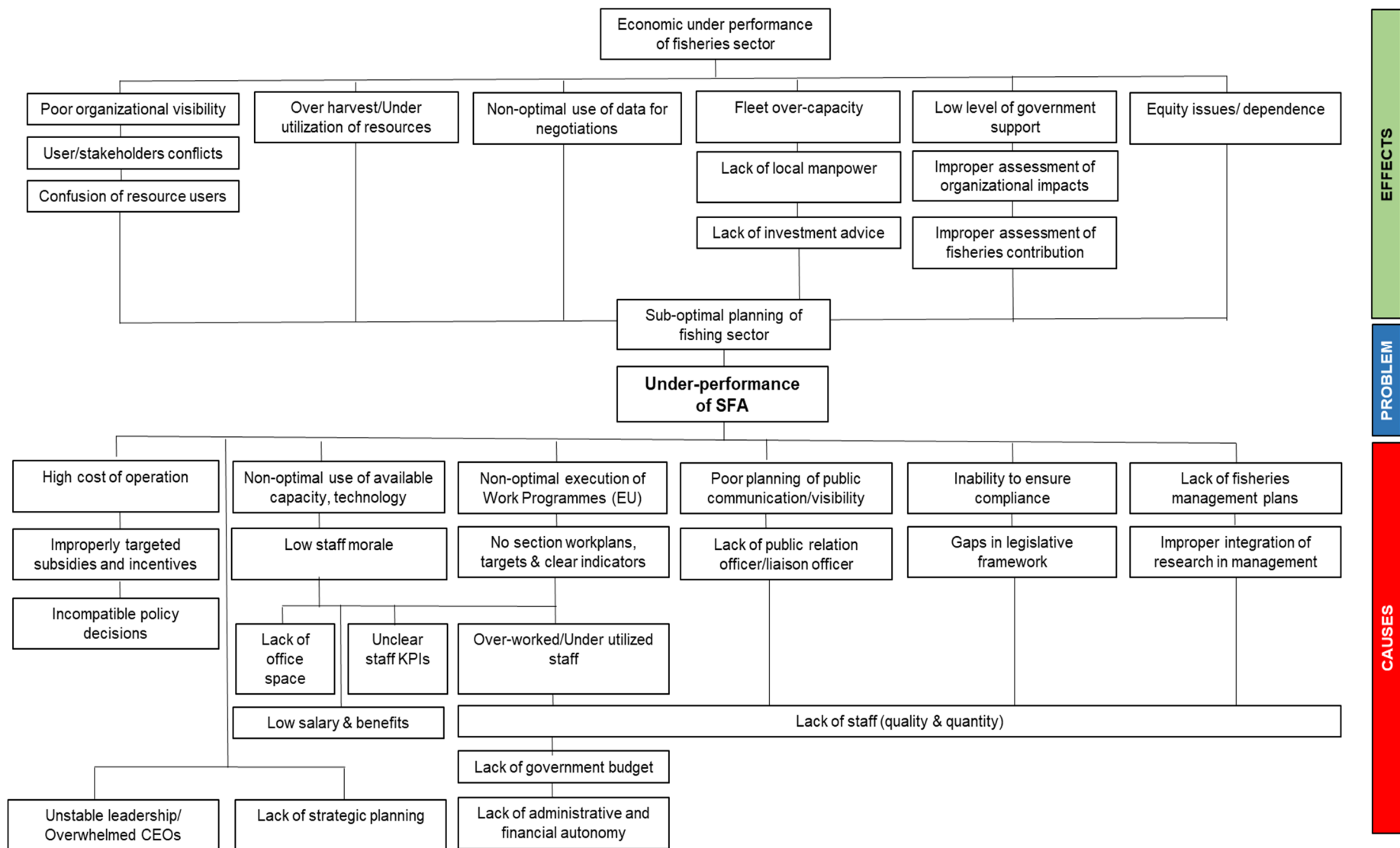


Fig. 9. Problem tree linking different causes linked to the under performance of the Seychelles Fisheries Authority and the resultant effects observed in the fisheries sector.

7. Annexes

Annex I – Performance of SFA and Seychelles on implementation of FAO's CCRF

Article No.	Statement	Comments on SFA and Seychelles' performance	Assessment
ARTICLE 6 - GENERAL PRINCIPLES			
6.1	States and users of living aquatic resources should conserve aquatic ecosystems. The right to fish carries with it the obligation to do so in a responsible manner so as to ensure effective conservation and management of the living aquatic resources.	The SFA has been active in promoting the conservation of aquatic ecosystems and have integrated eco-system-based management in many of their policies. However, on the ground there is little work being done to monitor the impact of fisheries on aquatic ecosystems. None of the fisheries have any form of ecosystem monitoring.	2
6.2	Fisheries management should promote the maintenance of the quality, diversity and availability of fishery resources in sufficient quantities for present and future generations in the context of food security, poverty alleviation and sustainable development. Management measures should not only ensure the conservation of target species but also of species belonging to the same ecosystem or associated with or dependent upon the target species.	Ensuring the sustainability of fishery resources is the core mission of SFA. Making use of fisheries resources as a means of ensuring food security and sustainable development also forms part of the Seychelles Fisheries Policy (2005) and the National Food and Nutritional Security Policy (2013). SFA has however been slow in addressing concerns with regards to declining availability of certain fishery resources, particularly in the demersal fishery. Declining availability of certain demersal resources have been highlighted in at least 3 different stock assessment reports.	2
6.3	States should prevent over fishing and excess fishing capacity and should implement management measures to ensure that fishing effort is commensurate with the productive capacity of the fishery resources and their sustainable utilization. States should take measures to rehabilitate populations as far as possible and when appropriate.	While SFA has played a crucial role in addressing issues of overfishing at the regional level in the tuna fishery it has continue to do very little to address over fishing and excess fishing capacity in the demersal fishing sector mainly due to policy mismatch. However, it must be pointed out that there are several activities being done towards this direction including the licensing framework which is being developed and implementation of Fisheries Management Plans.	2
6.4	Conservation and management decisions for fisheries should be based on the best scientific evidence available, also taking into account traditional knowledge of the resources and their habitat, as well as relevant environmental, economic and social factors. States should assign priority to undertake research and data collection in order to improve scientific and technical knowledge of fisheries including their interaction with the ecosystem. In recognizing the transboundary nature of many aquatic ecosystems, States should encourage bilateral and multilateral cooperation in research, as appropriate.	SFA has put a lot of emphasis on collecting data on catch and effort in the fisheries and are undertaking research to improve understanding of the biology of important species in the fisheries. However, the research team is relatively small and the number of research needs far exceeds what the team can deliver. The research being undertaken has focused more on the biology of exploited species. There has been little research on the social and economic side of Seychelles fisheries.	2

6.5	States and subregional and regional fisheries management organizations should apply a precautionary approach widely to conservation, management and exploitation of living aquatic resources in order to protect them and preserve the aquatic environment, taking account of the best scientific evidence available. The absence of adequate scientific information should not be used as a reason for postponing or failing to take measures to conserve target species, associated or dependent species and non-target species and their environment.	The SFA has put some emphasis on using the precautionary approach in instances where adequate scientific information has not been available. Making use of the precautionary approach in the artisanal fisheries have not been too successful in the absence of management plans and clear policies on how to reduce catch of overfished species.	2
6.6	Selective and environmentally safe fishing gear and practices should be further developed and applied, to the extent practicable, in order to maintain biodiversity and to conserve the population structure and aquatic ecosystems and protect fish quality. Where proper selective and environmentally safe fishing gear and practices exist, they should be recognized and accorded a priority in establishing conservation and management measures for fisheries. States and users of aquatic ecosystems should minimize waste, catch of non-target species, both fish and non-fish species, and impacts on associated or dependent species.	The fishing gears that have been approved by SFA for fishing in Seychelles waters are considered to be safe and selective. More research is however required to scientifically assess the selectivity of fishing gears in use.	3
6.7	The harvesting, handling, processing and distribution of fish and fishery products should be carried out in a manner which will maintain the nutritional value, quality and safety of the products, reduce waste and minimize negative impacts on the environment.	The Competent Authority and the Ministry of Health has guidelines established for safeguarding the quality and safety of fishery products. SFA has also organized training with local fishermen on good practices for post-handling of fish in the artisanal fishery. Samples of fish for exports are frequently sent for tests. There is however no active programme to monitor the quality of fish being sold by fishermen on the local market.	3
6.8	All critical fisheries habitats in marine and fresh water ecosystems, such as wetlands, mangroves, reefs, lagoons, nursery and spawning areas, should be protected and rehabilitated as far as possible and where necessary. Particular effort should be made to protect such habitats from destruction, degradation, pollution and other significant impacts resulting from human activities that threaten the health and viability of the fishery resources.	SFA has put some emphasis in the protection of spawning areas particularly for the Spinefoot shoemaker in the inner islands and Brown-marbled and Camouflage grouper in the Outer islands. However, SFA has not been very active in putting in place measures to protect other critical habitats such as mangroves, reefs and lagoons for fisheries purposes. SFA has however provided support to projects from fishermen's associations, some of which have been targeted at identifying important nursery areas. Environmental NGOs, the Seychelles National Parks Authority (SNPA) and the Ministry responsible for Environment has however put a lot of efforts in protecting and rehabilitating shallow marine habitats.	2

6.9	States should ensure that their fisheries interests, including the need for conservation of the resources, are taken into account in the multiple uses of the coastal zone and are integrated into coastal area management, planning and development.	SFA has supported the development of a policy section on Fisheries for the Seychelles Sustainable Development Strategy (2012 – 2020). It has also worked closely with the Marine Spatial Planning (MSP) initiatives to ensure that certain key area protecting fisheries resources are protected while ensuring that the different fisheries have reasonable access to resources.	3
6.10	Within their respective competences and in accordance with international law, including within the framework of subregional or regional fisheries conservation and management organizations or arrangements, States should ensure compliance with and enforcement of conservation and management measures and establish effective mechanisms, as appropriate, to monitor and control the activities of fishing vessels and fishing support vessels.	SFA has set up the Fisheries Monitoring Centre which can monitor fishing activities through the use of VMS. This system is shared with other law enforcement agencies such as the Seychelles Coast Guard which supports that enforcement of fisheries legislations. Inspection on port and at sea undertaken by SFA assists in the control of fishing activities.	3
6.11	States authorizing fishing and fishing support vessels to fly their flags should exercise effective control over those vessels so as to ensure the proper application of this Code. They should ensure that the activities of such vessels do not undermine the effectiveness of conservation and management measures taken in accordance with international law and adopted at the national, sub-regional, regional or global levels. States should also ensure that vessels flying their flags fulfill their obligations concerning the collection and provision of data relating to their fishing activities.	SFA monitors the activities of all fishing support vessels through the VMS system. There is however not enough inspection on board these vessels to ensure that their activities are not undermining the effectiveness of conservation and management measures.	3
6.12	States should, within their respective competences and in accordance with international law, cooperate at subregional, regional and global levels through fisheries management organizations, other international agreements or other arrangements to promote conservation and management, ensure responsible fishing and ensure effective conservation and protection of living aquatic resources throughout their range of distribution, taking into account the need for compatible measures in areas within and beyond national jurisdiction.	SFA represents the Seychelles Government in the dealings of Fisheries Management Organizations and other agreements with respect to fisheries and have been a strong supporter of sustainable fishing practices, especially when targeting stocks that straddles beyond national jurisdiction.	3
6.13	States should, to the extent permitted by national laws and regulations, ensure that decision making processes are transparent and achieve timely solutions to urgent matters. States, in accordance with appropriate procedures, should facilitate consultation and the effective participation of industry, fishworkers, environmental and other interested organizations in decision-making with respect to the development of laws and policies related to fisheries management, development, international lending and aid.	SFA has involved the participation of stakeholders in decision making with respect to the development of laws and policies related to fisheries management however, there is much more room to improve and to ensure that stakeholders are empowered and are able to constructively contribute in the consultation process.	2

6.14	International trade in fish and fishery products should be conducted in accordance with the principles, rights and obligations established in the World Trade Organization (WTO) Agreement and other relevant international agreements. States should ensure that their policies, programmes and practices related to trade in fish and fishery products do not result in obstacles to this trade, environmental degradation or negative social, including nutritional, impacts.	SFA has adhered to the requirements as part of Seychelles membership to the WTO with regards to trade in fish and fishery products and have not introduced any policies which could be considered as obstacle to trade or which could lead to environmental degradation or negative social impacts.	4
6.15	States should cooperate in order to prevent disputes. All disputes relating to fishing activities and practices should be resolved in a timely, peaceful and cooperative manner, in accordance with applicable international agreements or as may otherwise be agreed between the parties. Pending settlement of a dispute, the States concerned should make every effort to enter into provisional arrangements of a practical nature which should be without prejudice to the final outcome of any dispute settlement procedure.	SFA has been an active member of regional fisheries management bodies such as the IOTC and SWIOFC and have cooperated widely on fisheries matter in the region across multilateral and bilateral platforms. In conjunction with other concerned national authorities SFA has tried to prevent and solve disputes, particularly those related to IUU fishing, in a timely manner using domestic and international legal instruments.	4
6.16	States, recognizing the paramount importance to fishers and fishfarmers of understanding the conservation and management of the fishery resources on which they depend, should promote awareness of responsible fisheries through education and training. They should ensure that fishers and fishfarmers are involved in the policy formulation and implementation process, also with a view to facilitating the implementation of the Code.	Awareness of responsible fisheries have mostly been done on an ad hoc manner by SFA. There has not been any education and awareness plan apart from the one that was prepared as part of the process to draft of the management plan for the demersal fisheries operating over the Mahé Plateau. Lack of awareness about responsible fisheries has been particularly due to the fact that there has been no one dedicated to public relations, organizational visibility and education and awareness at SFA. However, SFA has made lots of effort in the past years to involve fishers in the management of living marine resources and has started to put in place structure to manage certain fisheries through co-management approaches.	2
6.17	States should ensure that fishing facilities and equipment as well as all fisheries activities allow for safe, healthy and fair working and living conditions and meet internationally agreed standards adopted by relevant international organizations.	SFA has not dedicated any personnel to work on issues with regards to safety, working and living conditions of fishers. Recent efforts have been made working with divers involved in the sea cucumber fishery to reduce the use of illicit drugs due to safety concerns.	2
6.18	Recognizing the important contributions of artisanal and small-scale fisheries to employment, income and food security, States should appropriately protect the rights of fishers and fishworkers, particularly those engaged in subsistence, small-scale and artisanal fisheries, to a secure and just livelihood, as well as preferential access, where appropriate, to traditional fishing grounds and resources in the waters under their national jurisdiction.	SFA through the government has put the right policies in place to protect the rights of fishers involved in small-scale and artisanal fisheries. Regulations are in place that prevents industrial fishing vessels from fishing on the plateau and ridges so that these locations are reserved for artisanal fishery. However, access for fishing in certain outer islands have been a contentious issue on certain occasions.	4

6.19	States should consider aquaculture, including culture-based fisheries, as a means to promote diversification of income and diet. In so doing, States should ensure that resources are used responsibly and adverse impacts on the environment and on local communities are minimized.	SFA has put a lot of effort in putting the right structures in place for the orderly development of the Seychelles aquaculture industry so as to increase revenue from marine living resources. SFA has raised funds and continues to dedicate its own financial and human resources in preparation of a Mariculture Master Plan and have gone through a full Social and Environmental Impact Assessment (SEIA).	3
Average score			2.68
ARTICLE 7 - FISHERIES MANAGEMENT			
7.1 General			
7.1.1	States and all those engaged in fisheries management should, through an appropriate policy, legal and institutional framework, adopt measures for the long-term conservation and sustainable use of fisheries resources. Conservation and management measures, whether at local, national, subregional or regional levels, should be based on the best scientific evidence available and be designed to ensure the long-term sustainability of fishery resources at levels which promote the objective of their optimum utilization and maintain their availability for present and future generations; short-term considerations should not compromise these objectives.	SFA continues to put in place measures for the long-term conservation and sustainable use of fisheries resources. The most noticeable action has been through the revision of the Fisheries Act in 2014. However, the fisheries regulations remains outdated. Conservation management measures are often based on best available science which tries to incorporate information on species biology, oceanography as well as social and economic aspects.	3
7.1.2	Within areas under national jurisdiction, States should seek to identify relevant domestic parties having a legitimate interest in the use and management of fisheries resources and establish arrangements for consulting them to gain their collaboration in achieving responsible fisheries.	Domestic parties with interest in the fishing sector have been identified and are frequently consulted in issues concerning the management of fisheries resources. However, there is a need to ensure that there are continuous feedback to parties on decision which have been taken and status of implementation of management measures.	3
7.1.3	For transboundary fish stocks, straddling fish stocks, highly migratory fish stocks and high seas fish stocks, where these are exploited by two or more States, the States concerned, including the relevant coastal States in the case of straddling and highly migratory stocks, should cooperate to ensure effective conservation and management of the resources. This should be achieved, where appropriate, through the establishment of a bilateral, subregional or regional fisheries organization or arrangement.	SFA is an active member of the Indian Ocean Tuna Commission (IOTC) and has been supportive of measures to temporarily reduce fishing pressure to allow the stock of over-fished tuna species to recover.	4
7.1.4	A subregional or regional fisheries management organization or arrangement should include representatives of States in whose jurisdictions the resources occur, as well as representatives from States which have a real interest in the fisheries or the resources outside national jurisdictions. Where a subregional or regional fisheries management organization or arrangement exists and has the competence to establish conservation and management measures, those States should cooperate by becoming a member of such	SFA has been active at the regional and subregional level and Seychelles is a member of both the Indian Ocean Tuna Commission (IOTC), the Southwestern Indian Ocean Fisheries Commission (SWIOFC) and South West Indian Ocean Fisheries Agreement (SWIOFA).	4

	organization or a participant in such arrangement, and actively participate in its work.		
7.1.5	A State which is not a member of a subregional or regional fisheries management organization or is not a participant in a subregional or regional fisheries management arrangement should nevertheless cooperate, in accordance with relevant international agreements and international law, in the conservation and management of the relevant fisheries resources by giving effect to any conservation and management measures adopted by such organization or arrangement.	Not appropriate for Seychelles, as the Seychelles is part of all the appropriate regional and subregional fisheries management organizations.	NA
7.1.6	Representatives from relevant organizations, both governmental and non-governmental, concerned with fisheries should be afforded the opportunity to take part in meetings of subregional and regional fisheries management organizations and arrangements as observers or otherwise, as appropriate, in accordance with the procedures of the organization or arrangement concerned. Such representative should be given timely access to the records and reports of such meetings, subject to the procedural rules on access to them.	The SFA has regularly facilitated the participation of non-governmental organizations in meetings of subregional and regional fisheries management organizations. However, SFA has failed to regularly advertise these meetings and to raise the awareness of other organizations about the issues of importance to be discussed in those meetings.	1
7.1.7	States should establish, within their respective competences and capacities, effective mechanisms for fisheries monitoring, surveillance, control and enforcement to ensure compliance with their conservation and management measures, as well as those adopted by subregional or regional organizations or arrangements.	SFA has put in place mechanisms for fisheries monitoring, surveillance, control and enforcement to ensure compliance with their conservation and management measures. There is a unit at SFA that is dedicated to MCS. However, much more resources (human, financial, equipment) are required to ensure more effective MCS.	3
7.1.8	States should take measures to prevent or eliminate excess fishing capacity and should ensure that levels of fishing effort are commensurate with the sustainable use of fishery resources as a means of ensuring the effectiveness of conservation and management measures.	SFA has been collaborating regionally at the IOTC level to reduce fishing effort in the tuna fisheries so as to rebuild the stock of yellow fin tuna. In the artisanal fisheries, SFA is designing a new licensing framework to better control entry into the fishery. In the artisanal fishery, action has been taken too late and there is already excess active and latent capacity. The new licensing framework should find means to rapidly reduce capacity in the fishery.	2
7.1.9	States and subregional or regional fisheries management organizations and arrangements should ensure transparency in the mechanisms for fisheries management and in the related decision-making process.	SFA has promoted transparency in the mechanisms for fisheries management allowing for discussion with stakeholders around the formulation of management plans, management measures and plans of actions and widely advertising licenses for most closed entry fisheries. However, there is still a lack of transparency in allocation of licenses in the sea cucumber fishery.	3

7.1.10	States and subregional or regional fisheries management organizations and arrangements should give due publicity to conservation and management measures and ensure that laws, regulations and other legal rules governing their implementation are effectively disseminated. The bases and purposes of such measures should be explained to users of the resource in order to facilitate their application and thus gain increased support in the implementation of such measures.	SFA has not been active in publicizing conservation and management measures. Much of the new measures adopted are not known by many stakeholders. The SFA website has not been used to actively publicize such information.	1
Average score			2.67
7.2 Management objectives			
7.2.1	Recognizing that long-term sustainable use of fisheries resources is the overriding objective of conservation and management, States and subregional or regional fisheries management organizations and arrangements should, inter alia, adopt appropriate measures, based on the best scientific evidence available, which are designed to maintain or restore stocks at levels capable of producing maximum sustainable yield, as qualified by relevant environmental and economic factors, including the special requirements of developing countries.	SFA worked closely with IOTC to ensure long-term sustainability of the tuna fisheries. For the artisanal fisheries, a management plan has been drafted for the demersal fishery operating over the Mahé Plateau. Certain species in the demersal fisheries are believed to being fished above MSY. The measures as part of the management plan are however not strong enough to bring harvest rate below MSY.	2
7.2.2	Such measures should provide inter alia that: a) excess fishing capacity is avoided and exploitation of the stocks remains economically viable; b) the economic conditions under which fishing industries operate promote responsible fisheries; c) the interests of fishers, including those engaged in subsistence, small-scale and artisanal fisheries, are taken into account; d) biodiversity of aquatic habitats and ecosystems is conserved and endangered species are protected; e) depleted stocks are allowed to recover or, where appropriate, are actively restored; f) adverse environmental impacts on the resources from human activities are assessed and, where appropriate, corrected; and g) pollution, waste, discards, catch by lost or abandoned gear, catch of non-target species, both fish and non-fish species and impacts on associated or dependent species are minimized, through measures including, to the extent practicable, the development and use of selective, environmentally safe and cost-effective fishing gear and techniques.	SFA has addressed excess fishing pressure in the industrial tuna fishery through IOTC resolutions. In the artisanal fisheries, SFA has addressed excess capacity in limited entry fisheries by controlling the number of licenses issued. However, there has been no control in terms of output (harvested amount) from these fisheries. The artisanal fishery is subsidized as part of a fuel scheme in which fishers are reimbursed certain percentage of funds that they spend on fuel. There has been no active measures to help depleted stock to recover apart from the case of the lobster fishery and the yellow fin tuna fishery. Adverse environmental impacts caused by human activities have rarely been assessed.	1

7.2.3	Pollution, waste, discards, catch by lost or abandoned gear, catch of non-target species, both fish and non-fish species, and impacts on associated or dependent species are minimized, through measures including, to the extent practicable, the development and use of selective, environmentally safe and cost effective fishing gear and techniques.	SFA has introduced measures in the industrial tuna fishery to reduce the number of Fish Aggregating Devices (FADs) deployed by the different fishing fleets. More ecological FADs have been developed but have not been promoted to fleet operators by SFA. In the artisanal fisheries there is little discard, abandonment of gears and catching of non-target species.	2
7.2.4	States should assess the impacts of environmental factors on target stocks and species belonging to the same ecosystem or associated with or dependent upon the target stocks, and assess the relationship among the populations in the ecosystem.	Few assessments of impacts of environmental factors on target stocks have been undertaken. Of notable importance is joint work which have been undertaken in collaboration with the University of Newcastle, Lancaster and James Cook on the impact of mass coral bleaching event on near-shore reef habitats including impacts on coral reef fish species. Some work has also investigated the impact of the deepening of the thermocline during El Nino years and its effect on the vertical distribution of tuna and on tuna catch.	2
Average score			1.75
7.3. Management framework and procedures			
7.3.1	To be effective, fisheries management should be concerned with the whole stock unit over its entire area of distribution and take into account previously agreed management measures established and applied in the same region, all removals and the biological unity and other biological characteristics of the stock. The best scientific evidence available should be used to determine, inter alia, the area of distribution of the resource and the area through which it migrates during its life cycle.	SFA has been proactive in this area when dealing with stocks of sessile and demersal species and have generally considered the whole of the Mahe Plateau as one stock unit. Some surveys have been undertaken to determine distribution of certain resources such as sea cucumber, sea urchins and certain fin fish species. However, research on area of distribution has been affected by a lack of scientific personnel and appropriate equipment, especially for surveying at depth.	2
7.3.2	In order to conserve and manage transboundary fish stocks, straddling fish stocks, highly migratory fish stocks and high seas fish stocks throughout their range, conservation and management measures established for such stocks in accordance with the respective competences of relevant States or, where appropriate, through subregional and regional fisheries management organizations and arrangements, should be compatible. Compatibility should be achieved in a manner consistent with the rights, competences and interests of the States concerned.	Due to its transboundary nature straddling fish stocks and high migratory fish stocks have been managed at the regional level through IOTC. The SFA has been active in decision making at the IOTC level and has defended the interest of Seychelles throughout.	3
7.3.3	Long-term management objectives should be translated into management actions, formulated as a Fishery Management Plan or other management framework.	SFA has only lately embraced Fishery Management Plans and as yet have no plans under implementation. Management objectives have been translated into management actions but more through an ad hoc basis than in a planned manner.	1

7.3.4	States and, where appropriate, subregional or regional fisheries management organizations and arrangements should foster and promote international cooperation and coordination in all matters related to fisheries, including information gathering and exchange, fisheries research, management and development.	SFA has played important roles in promoting international cooperation in matters related to fisheries and have formal links established with countries in the region such as Mauritius, Somalia, France and the UK. There has been cooperation in fisheries research mostly with France and there has been lots of cooperation in fisheries development particularly with the European Union and Japan.	3
7.3.5	States seeking to take any action through a non-fishery organization which may affect the conservation and management measures taken by a competent subregional or regional fisheries management organization or arrangement should consult with the latter, in advance to the extent practicable, and take its views into account.	The Seychelles has consulted with fisheries management organizations when such actions had to be taken. For example, the IOTC was consulted extensively as part of the Seychelles Marine Spatial Planning initiative.	4
Average score			2.60
7.4 Data gathering and management advice			
7.4.1	When considering the adoption of conservation and management measures, the best scientific evidence available should be taken into account in order to evaluate the current state of the fishery resources and the possible impact of the proposed measures on the resources.	Best scientific advice have been used in certain instances by SFA when considering adoption of conservation and management measures, especially in the tuna fisheries which are managed at the regional level. Advice have also been taken when dealing with measures in the demersal fishery, however, there has been a lot of delays in implementing management measures in the demersal fisheries.	2
7.4.2	Research in support of fishery conservation and management should be promoted, including research on the resources and on the effects of climatic, environmental and socio-economic factors. The results of such research should be disseminated to interested parties.	SFA has continue to allocate funding towards research as part of its budget. However, due to a lack of scientific staff, research has mostly been focused on improving the understanding of the biology of target species. Few research projects have focused on studying the effects of climatic, environmental and socio-economic factors. However, SFA keeps active a network of automatic temperature loggers around the inner islands.	2
7.4.3	Studies should be promoted which provide an understanding of the costs, benefits and effects of alternative management options designed to rationalize fishing, in particular, options relating to excess fishing capacity and excessive levels of fishing effort.	Such studies have been rare. Of notable exception is the study by Vivid Economics for “ <i>Fisheries recovery on the Mahé Plateau, Seychelles</i> ” which looked at transitioning from the current fishery model of a fishery in decline with low level of profitability and high level of subsidy to one which is better regulated with controlled access and higher level of profit and sustainability.	1
7.4.4	States should ensure that timely, complete and reliable statistics on catch and fishing effort are collected and maintained in accordance with applicable international standards and practices and in sufficient detail to allow sound statistical analysis. Such data should be updated regularly and verified through an appropriate system. States should compile and disseminate such data in a manner consistent with any applicable confidentiality requirements.	SFA has made a lot of efforts to collect fisheries data and input in databases. However there are still issues with certain foreign longliners not submitting their data on time, despite the fact that there has been major improvement in recent years in the number of vessels that are submitting their catch data. There are also issues regarding quality control of data from the demersal fishery. SFA has been very good in sharing data with its partners such as the FAO, IOTC and SWIOFC.	3

7.4.5	In order to ensure sustainable management of fisheries and to enable social and economic objectives to be achieved, sufficient knowledge of social, economic and institutional factors should be developed through data gathering, analysis and research.	SFA has no programme to develop knowledge on social, economic and institutional factors to ensure sustainable management of fisheries. Much of the knowledge that has been developed are based on the fisheries resources.	1
7.4.6	States should compile fishery-related and other supporting scientific data relating to fish stocks covered by subregional or regional fisheries management organizations or arrangements in an internationally agreed format and provide them in a timely manner to the organization or arrangement. In cases of stocks which occur in the jurisdiction of more than one State and for which there is no such organization or arrangement, the States concerned should agree on a mechanism for cooperation to compile and exchange such data.	SFA has been compiling and submitting data relating to fish stocks covered by regional fisheries management organizations. There are delays in certain cases but generally data provision has been good.	3
7.4.7	Subregional or regional fisheries management organizations or arrangements should compile data and make them available, in a manner consistent with any applicable confidentiality requirements, in a timely manner and in an agreed format to all members of these organizations and other interested parties in accordance with agreed procedures.	Not applicable to the duties of SFA or any other national organizations.	NA
Average score			2.00
7.5 Precautionary approach			
7.5.1	States should apply the precautionary approach widely to conservation, management and exploitation of living aquatic resources in order to protect them and preserve the aquatic environment. The absence of adequate scientific information should not be used as a reason for postponing or failing to take conservation and management measures.	SFA's approach to fisheries management, especially in the artisanal fisheries, has not been based on the precautionary approach. The only fishery in which the precautionary approach has been applied is the seasonal lobster fishery in which there has been several closed seasons over the years.	1
7.5.2	In implementing the precautionary approach, States should take into account, inter alia, uncertainties relating to the size and productivity of the stocks, reference points, stock condition in relation to such reference points, levels and distribution of fishing mortality and the impact of fishing activities, including discards, on non-target and associated or dependent species as well as environmental and socio-economic conditions.	A lot of these information are not available for the local fisheries, which means that the precautionary approach has not been widely adopted.	1
7.5.3	States and subregional or regional fisheries management organizations and arrangements should, on the basis of the best scientific evidence available, inter alia, determine: a) stock specific target reference points, and, at the same time, the action to be taken if they are exceeded; and b) stock specific limit reference points and, at the same time, the action to be taken if they are exceeded; when a limit reference	Target specific reference points have only lately been identified and applied in the industrial and local artisanal fishery. IOTC has target and limit reference points for each of the main species of concern and the management plan for the demersal fishery operating over the Mahé Plateau has target and limit reference points for the main species of concerned.	2

	point is approached, measures should be taken to ensure that it will not be exceeded.		
7.5.4	In the case of new or exploratory fisheries, States should adopt as soon as possible cautious conservation and management measures, including, inter alia, catch limits and effort limits. Such measures should remain in force until there are sufficient data to allow assessment of the impact of the fisheries on the long-term sustainability of the stocks, whereupon conservation and management measures based on that assessment should be implemented. The latter measures should, if appropriate, allow for the gradual development of the fisheries.	There has been no recent new exploratory species in the Seychelles, hence this measure has not been applied.	NA
7.5.5	If a natural phenomenon has a significant adverse impact on the status of living aquatic resources, States should adopt conservation and management measures on an emergency basis to ensure that fishing activity does not exacerbate such adverse impact. States should also adopt such measures on an emergency basis where fishing activity presents a serious threat to the sustainability of such resources. Measures taken on an emergency basis should be temporary and should be based on the best scientific evidence available.	Such measures have never been applied in the Seychelles.	NA
Average score			1.33
7.6 Management measures			
7.6.1	States should ensure that the level of fishing permitted is commensurate with the state of fisheries resources.	SFA has taken measures to ensure this in only a few fisheries such as the industrial tuna fishery (through IOTC) and the lobster fishery. SFA is trying to implement this in the sea cucumber fishery which has started to show signs of over exploitation. SFA has however not been able to ensure commensurate level of fishing pressure on certain target species in the demersal fishery. This is due to the multi-specific and unselective nature of the fishery.	2
7.6.2	States should adopt measures to ensure that no vessel be allowed to fish unless so authorized, in a manner consistent with international law for the high seas or in conformity with national legislation within areas of national jurisdiction.	SFA has ensured that all vessels involved in commercial fishing have the necessary permission to fish. However, at the level of the recreational and small-scale artisanal fisheries there has been no real control on which vessel is allowed to fish.	2
7.6.3	Where excess fishing capacity exists, mechanisms should be established to reduce capacity to levels commensurate with the sustainable use of fisheries resources so as to ensure that fishers operate under economic conditions that promote responsible fisheries. Such mechanisms should include monitoring the capacity of fishing fleets.	SFA has contributed towards the reduction of excess fishing capacity in the industrial tuna fishery as part of IOTC resolutions. At the national level, SFA has limited fishing capacity in the lobster and sea cucumber fishery through control of number of licenses issued.	2

7.6.4	The performance of all existing fishing gear, methods and practices should be examined and measures taken to ensure that fishing gear, methods and practices which are not consistent with responsible fishing are phased out and replaced with more acceptable alternatives. In this process, particular attention should be given to the impact of such measures on fishing communities, including their ability to exploit the resource.	There is no current programme at SFA to assess the performance of fishing gears, methods and practices not consistent with responsible fishing. However SFA has over the years restricted the use of certain fishing gears such as drifting gill nets and has maintained banned on gears such as speargun, and fish poison.	1
7.6.5	States and fisheries management organizations and arrangements should regulate fishing in such a way as to avoid the risk of conflict among fishers using different vessels, gear and fishing methods.	SFA has over the years has regulated fisheries in such way as to avoid conflicts by having different zones for artisanal and industrial fisheries. The main conflict that are presently observed is in relation to catch by charter boats and artisanal fishing boats and certain artisanal fishing boats fishing with bottom-set long line. There are also conflicts with regards to certain boats doing barrel chumming to attract sharks.	3
7.6.6	When deciding on the use, conservation and management of fisheries resources, due recognition should be given, as appropriate, in accordance with national laws and regulations, to the traditional practices, needs and interests of indigenous people and local fishing communities which are highly dependent on fishery resources for their livelihood.	Before introducing new management measures, the SFA has consulted local fishermen and boat owners as well as fishermen associations. Stakeholders' consultation during the process of preparation of fisheries management plans is a legal requirement under section 5(3) of the Fisheries Act (2014).	4
7.6.7	In the evaluation of alternative conservation and management measures, their cost-effectiveness and social impact should be considered.	Cost-effectiveness and social impacts of alternative conservation measures have tended to be considered.	3
7.6.8	The efficacy of conservation and management measures and their possible interactions should be kept under continuous review. Such measures should, as appropriate, be revised or abolished in the light of new information.	Assessing the efficacy of management measures have only focused on certain fisheries such as the tuna purse seine fishery and the lobster fishery. For the tuna lobster fishery, stock is assessed annually before deciding on the number of licenses to be given for the next season. However for the other exploited stocks the efficacy of conservation measures are yet to be assessed.	2
7.6.9	States should take appropriate measures to minimize waste, discards, catch by lost or abandoned gear, catch of non-target species, both fish and non-fish species, and negative impacts on associated or dependent species, in particular endangered species. Where appropriate, such measures may include technical measures related to fish size, mesh size or gear, discards, closed seasons and areas and zones reserved for selected fisheries, particularly artisanal fisheries. Such measures should be applied, where appropriate, to protect juveniles and spawners. States and sub-regional or regional fisheries management organizations and arrangements should promote, to the	SFA has supported measures through the IOTC to minimize discards and catch of non-fish species such as turtles and dolphins. Measures have been introduced for purse seiners to land their by-catch so as to reduce discards at sea. The Mahe Plateau and the other banks and plateaus are designated for artisanal fisheries only. There is also a long established minimum mesh size for fish traps in the artisanal fishery.	3

	extent practicable, the development and use of selective, environmentally safe and cost effective gear and techniques.		
7.6.10	States and subregional and regional fisheries management organizations and arrangements, in the framework of their respective competences, should introduce measures for depleted resources and those resources threatened with depletion that facilitate the sustained recovery of such stocks. They should make every effort to ensure that resources and habitats critical to the well-being of such resources which have been adversely affected by fishing or other human activities are restored.	SFA has worked with IOTC and countries in the region to address issues with declining stocks of yellow fin tuna. Measures have also been introduced to control fisheries for sea cucumber, lobsters and sharks. There are measures in the management plan for the demersal fisheries operating over the Mahe Plateau to address declining stocks of certain finfishes but this management plan is yet to be implemented.	2
Average score			2.40
7.7 Implementation			
7.7.1	States should ensure that an effective legal and administrative framework at the local and national level, as appropriate, is established for fisheries resource conservation and fisheries management.	SFA has done some work on improving the legal framework for fisheries resource conservation and fisheries management through the revision of the Fisheries Act. There is however a need to revise the Fisheries Regulations to better reflect present situation. The administrative framework is in existence but suffers from a lack of qualified human resources.	2
7.7.2	States should ensure that laws and regulations provide for sanctions applicable in respect of violations which are adequate in severity to be effective, including sanctions which allow for the refusal, withdrawal or suspension of authorizations to fish in the event of non-compliance with conservation and management measures in force.	SFA has ensured that sanctions applicable in respect of violations which are adequate in severity to be effective through the revision of the Fisheries Act. There are however certain components of the act that continues to affect its effectiveness. There is recommendation for the Fisheries Act (2014) to be further revised to address the various identified shortfalls.	3
7.7.3	States, in conformity with their national laws, should implement effective fisheries monitoring, control, surveillance and law enforcement measures including, where appropriate, observer programmes, inspection schemes and vessel monitoring systems. Such measures should be promoted and, where appropriate, implemented by subregional or regional fisheries management organizations and arrangements in accordance with procedures agreed by such organizations or arrangements.	SFA has in place several fisheries monitoring programmes and have units that undertake monitoring, control and surveillance programmes. There is a scientific observer programme on tuna purse seiners which is currently being implemented. SFA has also participated in regional MCS initiatives and collaborates with local law enforcement agencies like the Seychelles Coast Guard, Air Wing and Drug Enforcement Unit of the Seychelles Police in fisheries surveillance activities. However, there are still gaps in monitoring in certain fisheries and the fisheries monitoring programme needs to be expanded and strengthen to fill the gaps.	4

7.7.4	States and subregional or regional fisheries management organizations and arrangements, as appropriate, should agree on the means by which the activities of such organizations and arrangements will be financed, bearing in mind, inter alia, the relative benefits derived from the fishery and the differing capacities of countries to provide financial and other contributions. Where appropriate, and when possible, such organizations and arrangements should aim to recover the costs of fisheries conservation, management and research.	This has been decided upon with regards to the IOTC and SWIOFC and is in force.	4
7.7.5	States which are members of or participants in subregional or regional fisheries management organizations or arrangements should implement internationally agreed measures adopted in the framework of such organizations or arrangements and consistent with international law to deter the activities of vessels flying the flag of non-members or non-participants which engage in activities which undermine the effectiveness of conservation and management measures established by such organizations or arrangements.	SFA and Seychelles have implement internationally agreed measures adopted in the framework of regional fisheries management organizations. However due to lack of human resource capacity not all measures have been implemented to the required level.	3
Average score			3.2
7.8 Financial Institutions			
7.8.1	Without prejudice to relevant international agreements, States should encourage banks and financial institutions not to require, as a condition of a loan or mortgage, fishing vessels or fishing support vessels to be flagged in a jurisdiction other than that of the State of beneficial ownership where such a requirement would have the effect of increasing the likelihood of noncompliance with international conservation and management measures.	No information was available on Seychelles performance with regards to this measure.	NA
Average score			N assessed
ARTICLE 8 - FISHING OPERATIONS			
8.1 Duties of all states			
8.1.1	States should ensure that only fishing operations allowed by them are conducted within waters under their jurisdiction and that these operations are carried out in a responsible manner.	SFA has set in place a Monitoring Control and Surveillance Division to monitor fishing activities in Seychelles waters and of Seychelles flagged vessels in other territories. This is facilitated by the use of VMS onboard vessels to get near-real time data. Sea and air patrols are undertaken from time to time in collaboration with other law enforcement agencies such as the Seychelles Coast Guard to identify possible illegal fishing activities.	3
8.1.2	States should maintain a record, updated at regular intervals, on all authorizations to fish issued by them.	A record of all fishing licenses and authorization is kept by SFA. However, for the small-scale artisanal fisheries some fishers do not regularly renew their licenses as required.	3

8.1.3	States should maintain, in accordance with recognized international standards and practices, statistical data, updated at regular intervals, on all fishing operations allowed by them.	SFA has put in place a long-running Catch Assessment Survey which monitors catch in all fisheries. Data are also collected on the cost of fishing operations.	3
8.1.4	States should, in accordance with international law, within the framework of subregional or regional fisheries management organizations or arrangements, cooperate to establish systems for monitoring, control, surveillance and enforcement of applicable measures with respect to fishing operations and related activities in waters outside their national jurisdiction.	SFA has been supportive of regional collaboration for Monitoring, Control and Surveillance of fishing operations in waters outside of national jurisdiction. However, most enforcement activities are undertaken within the EEZ and regional initiatives to monitor and control fishing operations outside national jurisdiction have mostly been spearheaded by regional donor funded project, with little continuity on the regional level after the completion of projects.	2
8.1.5	States should ensure that health and safety standards are adopted for everyone employed in fishing operations. Such standards should be not less than the minimum requirements of relevant international agreements on conditions of work and service.	SFA has been supportive of the development of health standards for operations dealing with the processing and transshipment of fish and fisheries products. Most of these standards are laid down by the European Union for exports into EU countries. In the artisanal fishing sector health and safety standards are much lower and are not regularly assessed.	2
8.1.6	States should make arrangements individually, together with other States or with the appropriate international organization to integrate fishing operations into maritime search and rescue systems.	There has been efforts by SFA and the Seychelles Government to integrate fishing operations into maritime search and rescue systems. The Seychelles Coast Guard have access to the Themis System which provides them with the positions of all Seychelles vessels with VMS as well as those that are licensed to fish in Seychelles waters.	3
8.1.7	States should enhance through education and training programmes the education and skills of fishers and, where appropriate, their professional qualifications. Such programmes should take into account agreed international standards and guidelines.	SFA has done some work in training of fishers for STCW qualification. However, these training has been organized on an ad hoc level and there is no long-term STCW trainings.	1
8.1.8	States should, as appropriate, maintain records of fishers which should, whenever possible, contain information on their service and qualifications, including certificates of competency, in accordance with their national laws.	SFA has established a record of artisanal fishers. However, the record is not complete and there are many fishers which are not registered. The record does not contain information on fishers' qualifications.	2
8.1.9	States should ensure that measures applicable in respect of masters and other officers charged with an offence relating to the operation of fishing vessels should include provisions which may permit, inter alia, refusal, withdrawal or suspension of authorizations to serve as masters or officers of a fishing vessel.	Records are kept by SFA on masters and other officers of fishing vessels with regards to offence which have been committed.	3
8.1.10	States, with the assistance of relevant international organizations, should endeavour to ensure through education and training that all those engaged in fishing operations be given information on the most important provisions of this Code, as well as provisions of relevant international conventions and applicable environmental and other standards that are essential to ensure responsible fishing operations.	SFA is yet to implement any type of education, awareness and training programme to transfer information on this code to those engaged in fishing operations. This is most probably due to the fact that SFA do not have a dedicate person responsible for education, awareness and public relations.	1
Average score			2.30

8.2 Flag state duties			
8.2.1	Flag States should maintain records of fishing vessels entitled to fly their flag and authorized to be used for fishing and should indicate in such records details of the vessels, their ownership and authorization to fish.	SFA maintains records of all commercial fishing vessels entitled to fly the Seychelles flag and those authorized to fish. However, SFA has no record of local non-commercial fishing vessels such as those involved in the charter and recreational fisheries.	3
8.2.2	Flag States should ensure that no fishing vessels entitled to fly their flag fish on the high seas or in waters under the jurisdiction of other States unless such vessels have been issued with a Certificate of Registry and have been authorized to fish by the competent authorities. Such vessels should carry on board the Certificate of Registry and their authorization to fish.	SFA keeps good record of fishing activities of foreign and local flagged vessels.	4
8.2.3	Fishing vessels authorized to fish on the high seas or in waters under the jurisdiction of a State other than the flag State, should be marked in accordance with uniform and internationally recognizable vessel marking systems such as the FAO Standard Specifications and Guidelines for Marking and Identification of Fishing Vessels.	SFA has implemented regulations to ensure that fishing vessels fishing on the high seas are appropriately marked.	4
8.2.4	Fishing gear should be marked in accordance with national legislation in order, that the owner of the gear can be identified. Gear marking requirements should take into account uniform and internationally recognizable gear marking systems.	The Fisheries Act (2014) give SFA the powers to mark fishing gears. This regulation is implemented in the industrial fisheries however for the artisanal fisheries there are no requirement from SFA for gear to be marked. There is however strong support for the marking of fishing gears, especially fish traps from fishermen.	2
8.2.5	Flag States should ensure compliance with appropriate safety requirements for fishing vessels and fishers in accordance with international conventions, internationally agreed codes of practice and voluntary guidelines. States should adopt appropriate safety requirements for all small vessels not covered by such international conventions, codes of practice or voluntary guidelines.	SFA has no dedicated personnel responsible for ensuring appropriate safety compliance of fishing vessel and fishers. There are no safety requirements for small vessels in place.	1
8.2.6	States not party to the Agreement to Promote Compliance with International Conservation and Management Measures by Vessels Fishing in the High Seas should be encouraged to accept the Agreement and to adopt laws and regulations consistent with the provisions of the Agreement.	Seychelles is a party to the Agreement to Promote Compliance with International Conservation and Management Measures by Vessels Fishing in the High Seas and SFA's Monitoring Control and Surveillance division ensures that all vessels are compliant to the measures under the agreement.	4
8.2.7	Flag States should take enforcement measures in respect of fishing vessels entitled to fly their flag which have been found by them to have contravened applicable conservation and management measures, including, where appropriate, making the contravention of such measures an offence under national legislation. Sanctions applicable in respect of violations should be adequate in severity to be effective in securing compliance and to discourage violations wherever they occur and should deprive offenders of the benefits accruing from their illegal activities. Such sanctions may, for serious violations, include	SFA has ensured that sanctions applicable in respect of violations are adequate in severity to be effective in securing compliance and to discourage violations through new penalties in the Fisheries Act (2014).	4

	provisions for the refusal, withdrawal or suspension of the authorization to fish.		
8.2.8	Flag States should promote access to insurance coverage by owners and charterers of fishing vessels. Owners or charterers of fishing vessels should carry sufficient insurance cover to protect the crew of such vessels and their interests, to indemnify third parties against loss or damage and to protect their own interests.	SFA has been instrumental in the development of an insurance scheme for local fishing vessels. However, uptake has been relatively low as it is not mandatory for vessel to have insurance. However, it is mandatory for fishing vessels that are financed through bank loans to have insurance.	3
8.2.9	Flag States should ensure that crew members are entitled to repatriation, taking account of the principles laid down in the "Repatriation of Seafarers Convention (Revised), 1987, (No.166)".	SFA implements the convention for the Repatriation of Seafarers and have repatriated seafarers on many occasions in the past.	4
8.2.10	In the event of an accident to a fishing vessel or persons on board a fishing vessel, the flag State of the fishing vessel concerned should provide details of the accident to the State of any foreign national on board the vessel involved in the accident. Such information should also, where practicable, be communicated to the International Maritime Organization.	In cases of accidents, SFA has provided details to the states concerned.	4
Average score			3.30
8.3 Port state duties			
8.3.1	Port States should take, through procedures established in their national legislation, in accordance with international law, including applicable international agreements or arrangements, such measures as are necessary to achieve and to assist other States in achieving the objectives of this Code, and should make known to other States details of regulations and measures they have established for this purpose. When taking such measures a port State should not discriminate in form or in fact against the vessels of any other State.	SFA has ensured that such procedures have been established in the national legislation through article 55(2) of the Fisheries Act (2014).	4
8.3.2	Port States should provide such assistance to flag States as is appropriate, in accordance with the national laws of the port State and international law, when a fishing vessel is voluntarily in a port or at an offshore terminal of the port State and the flag State of the vessel requests the port State for assistance in respect of non-compliance with subregional, regional or global conservation and management measures or with internationally agreed minimum standards for the prevention, of pollution and for safety, health and conditions of work on board fishing vessels.	Through the Fishery Monitoring Centre (FMC) SFA has provided assistance to other flag states with regards to compliance issues involving their vessels.	4
Average score			4.00

8.4 Fishing operations			
8.4.1	States should ensure that fishing is conducted with due regard to the safety of human life and the International Maritime Organization International Regulations for Preventing Collisions at Sea, as well as International Maritime Organization requirements relating to the organization of marine traffic, protection of the marine environment and the prevention of damage to or loss of fishing gear.	Navigation zones and areas to be avoided are well demarcated on Seychelles charts. As a result there has been very few instances of collision at sea.	4
8.4.2	States should prohibit dynamiting, poisoning and other comparable destructive fishing practices.	Through the provision of the Fisheries Act (2014) SFA has provided the legislative framework prohibiting the use of dynamite, poison and other destructive fishing techniques.	4
8.4.3	States should make every effort to ensure that documentation with regard to fishing operations, retained catch of fish and non-fish species and, as regards discards, the information required for stock assessment as decided by relevant management bodies, is collected and forwarded systematically to those bodies. States should, as far as possible, establish programmes, such as observer and inspection schemes, in order to promote compliance with applicable measures.	SFA has a long-term catch monitoring programme in place for both the demersal fisheries and the industrial tuna fishing and regularly submits data to IOTC. Demersal fisheries data are made available to scientists interested in stock assessments. An observer programme on industrial tune purse seiners have been operational for a number of years now.	3
8.4.4	States should promote the adoption of appropriate technology, taking into account economic conditions, for the best use and care of the retained catch.	Post-harvest care in the artisanal fisheries remain relatively low-tech with most boats storing fish on ice. In the industrial fisheries more advance technologies such as blast freezing is being used on an increasing number of vessels.	2
8.4.5	States, with relevant groups from industry, should encourage the development and implementation of technologies and operational methods that reduce discards. The use of fishing gear and practices that lead to the discarding of catch should be discouraged and the use of fishing gear and practices that increase survival rates of escaping fish should be promoted.	SFA has actively cooperated at regional level through the IOTC to reduce the level of discard in the industrial tune fishery through adoption of better gear specifications and inspection of fishing gears in port. New policies are also encouraging the retention of discards for food.	2
8.4.6	States should cooperate to develop and apply technologies, materials and operational methods that minimize the loss of fishing gear and the ghost fishing effects of lost or abandoned fishing gear.	Researchers from SFA and from other states have cooperated in the development of technologies, materials and operational methods to minimize loss of fishing gears and ghost fishing by abandoned fishing gears. IRD has been a strong partner for such type of collaboration in various projects such as FADIO, CAPPES and MADE.	3
8.4.7	States should ensure that assessments of the implications of habitat disturbance are carried out prior to the introduction on a commercial scale of new fishing gear, methods and operations to an area.	No such assessments are known to have been undertaken by SFA prior to the introduction of new fishing gears, methods and operations.	0
8.4.8	Research on the environmental and social impacts of fishing gear and, in particular, on the impact of such gear on biodiversity and coastal fishing communities should be promoted.	There has been a few studies on the biodiversity impacts of different fishing gears. However, the environmental and social impacts of different fishing gears remain relatively unstudied.	1
Average score			2.38

8.5 Fishing gear selectivity			
8.5.1	States should require that fishing gear, methods and practices, to the extent practicable, are sufficiently selective so as to minimize waste, discards, catch of non-target species, both fish and non-fish species, and impacts on associated or dependent species and that the intent of related regulations is not circumvented by technical devices. In this regard, fishers should cooperate in the development of selective fishing gear and methods. States should ensure that information on new developments and requirements is made available to all fishers.	SFA, through the Fisheries Act and Fisheries Regulations have banned the use of gears which are less selective such as drifting nets and bottom-trawls. Most of the gears being used in Seychelles fisheries have relatively high level of selectivity.	3
8.5.2	In order to improve selectivity, States should, when drawing up their laws and regulations, take into account the range of selective fishing gear, methods and strategies available to the industry.	Through the Fisheries Act, SFA has defined authorized gears for use in Seychelles waters, which helps to improve selectivity.	4
8.5.3	States and relevant institutions should collaborate in developing standard methodologies for research into fishing gear selectivity, fishing methods and strategies.	No standard methodologies have been developed by SFA for research into fishing gear selectivity, fishing methods and strategies.	1
8.5.4	International cooperation should be encouraged with respect to research programmes for fishing gear selectivity, and fishing methods and strategies, dissemination of the results of such research programmes and the transfer of technology.	SFA has cooperated internationally with respect to research programmes for fishing gear selectivity. To date, much of the research programmes have focused on pelagic long-lines. More research is needed to establish the selectivity of the main gears being used in the different fisheries.	2
Average score			2.50
8.6 Energy optimization			
8.6.1	States should promote the development of appropriate standards and guidelines which would lead to the more efficient use of energy in harvesting and postharvest activities within the fisheries sector.	SFA has not developed any standards and guidelines to increase efficiency of energy use in harvesting and postharvest activities within the fisheries sector. However, there are programmes in place to encourage all sectors, including fisheries, to make use of renewable energy so as to reduce the long-term cost of energy in operations.	2
8.6.2	States should promote the development and transfer of technology in relation to energy optimization within the fisheries sector and, in particular, encourage owners, charterers and managers of fishing vessels to fit energy optimization devices to their vessels.	At the national level, there are incentives in place for the use of energy optimization devices to decrease energy needs. This is in terms of lower taxes for energy efficient devices. This is however not limited to the fishing sector.	2
Average score			2.00
8.7 Protection of the aquatic environment			
8.7.1	States should introduce and enforce laws and regulations based on the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating there to (MARPOL 73/78).	Such regulations are in place and seems to be better adhered to by larger vessels compared to smaller ones, most probably as a result of limited storage spaces for waste.	3

8.7.2	Owners, charterers and managers of fishing vessels should ensure that their vessels are fitted with appropriate equipment as required by MARPOL 73/78 and should consider fitting a shipboard compactor or incinerator to relevant classes of vessels in order to treat garbage and other shipboard wastes generated during the vessel's normal service.	Seychelles is a signatory of the MARPOL Convention of 1973. Some larger vessels have incinerator installed. Service is provided for shipping vessels to offload their waste in Port Victoria and at small regional fishing ports. All vessels are encouraged to bring all their waste for discharge in port. However, there is no monitoring on how vessels are complying with regulations concerning the discharge of wastes.	2
8.7.3	Owners, charterers and managers of fishing vessels should minimize the taking aboard of potential garbage through proper provisioning practices.	SFA has not done any types of study to look at provisioning practices for fishing vessels to minimize taking onboard of potential garbage on fishing vessels and as a result no data exist on such practices. More awareness is required to sensitize managers of fishing vessels on proper management of garbage.	1
8.7.4	The crew of fishing vessels should be conversant with proper shipboard procedures in order to ensure discharges do not exceed the levels set by MARPOL. 73/78. Such procedures should, as a minimum, include the disposal of oily waste and the handling and storage of shipboard garbage.	SFA has not done any trainings with regards to shipboard procedures to ensure that discharges do not exceed levels set by MARPOL 73/78. There are no specific officers at SFA that is designated to work on issues concerning discharges of waste from fishing vessels.	1
Average score			1.75
8.8 Protection of the atmosphere			
8.8.1	States should adopt relevant standards and guidelines which would include provisions for the reduction of dangerous substances in exhaust gas emissions.	Standards and guidelines have been put in place to reduce dangerous substances in exhaust gas, particularly in motor vehicles. However, there has not been standards and guidelines specific to the fishing industry. Measures taken at country level to improve the quality of diesel on sale on the local market and to introduce 4 stroke outboard engine technologies has certainly helped in reducing emission of dangerous substances in exhaust gas.	2
8.8.2	Owners, charterers and managers of fishing vessels should ensure that their vessels are fitted with equipment to reduce emissions of ozone depleting substances. The responsible crew members of fishing vessels should be conversant with the proper running and maintenance of machinery on board.	It is now a national requirement for local fishing vessels not to make use of equipment using ozone depleting substances, especially as part of their refrigeration system.	4
8.8.3	Competent authorities should make provision for the phasing out of the use of chlorofluorocarbons (CFCs) and transitional substances such as hydro chlorofluorocarbons (HCFCs) in the refrigeration systems of fishing vessels and should ensure that the shipbuilding industry and those engaged in the fishing industry are informed of and comply with such provisions.	At the national level there has been a campaign to educate actors in all sectors on the phasing out of CFCs, HCFCs and Halons as refrigerants.	4

8.8.4	Owners or managers of fishing vessels should take appropriate action to refit existing vessels with alternative refrigerants to CFCs and HCFCs and alternatives to Halons in fire fighting installations. Such alternatives should be used in specifications for all new fishing vessels.	Through the review process for permit to import new fishing vessels in the country SFA has been able to ensure that all new fishing vessels are not making use of CFCs, HCFCs and Halons refrigerant. As the importation of CFCs, HCFCs and Halons have been banned since the end of 2017, the few fishing vessels already making use of such refrigerants will have no choice but to refit their existing vessels.	4
8.8.5	States and owners, charterers and managers of fishing vessels as well as fishers should follow international guidelines for the disposal of CFCs, HCFCs and Halons.	All refrigeration technicians operating locally have been trained on the disposal of CFCs, HCFCs and Halons. There has however been no studies commissioned by SFA to look at performance in the fishing industry.	4
Average score			3.60
8.9 Harbours and landing places for fishing vessels			
8.9.1	States should take into account, inter alia, the following in the design and construction of harbours and landing places: a) safe havens for fishing vessels and adequate servicing facilities for vessels, vendors and buyers are provided; b) adequate freshwater supplies and sanitation arrangements should be provided; c) waste disposal systems should be introduced, including for the disposal of oil, oily water and fishing gear; d) pollution from fisheries activities and external sources should be minimized; and e) arrangements should be made to combat the effects of erosion and siltation.	SFA has worked with relevant international partners in the design of harbours and landing places to ensure that these facilities provide safe havens for vessels, have adequate freshwater supplies, toilets and waste oil disposal systems. Water quality in the port are relatively decent and oil slicks are rarely observed. There are however no programmes to continuously monitor water quality in fishing ports and no system in place to identify point sources of pollutions.	3
8.9.2	States should establish an institutional framework for the selection or improvement of sites for harbours for fishing vessels which allows for consultation among the authorities responsible for coastal area management.	All harbours for fishing vessels have long been established and all harbour constructions and major renovations have to undergo full Environmental Impact Assessment to ensure that the construction and operation of such harbours have minimal impact on the environment. The construction of new ports and harbours have usually been advised to stakeholders at a very early stage.	3
Average score			3.00
8.10 Abandonment of structures and other materials			
8.10.1	States should ensure that the standards and guidelines for the removal of redundant offshore structures issued by the International Maritime Organization are followed. States should also ensure that the competent fisheries authorities are consulted prior to decisions being made on the abandonment of structures and other materials by the relevant authorities.	There are regulations in place concerning the removal of redundant offshore structures. SFA has usually been informed in instances when there are structures (e.g. wrecked ship) that are being abandoned at sea.	3
Average score			3.00

8.11 Artificial reefs and fish aggregation devices			
8.11.1	States, where appropriate, should develop policies for increasing stock populations and enhancing fishing opportunities through the use of artificial structures, placed with due regard to the safety of navigation, on or above the seabed or at the surface. Research into the use of such structures, including the impacts on living marine resources and the environment, should be promoted.	Fish Aggregating Devices (FADs) are widely used in the tuna purse seine fishery. The SFA has prepared and is implementing a FAD management plan to control the number of FADs in the sea. Artificial reefs have not been widely used to increase opportunities for fishing. SFA has collaborated extensively with IRD and AZTI to research the impacts of FADs on living marine resources.	3
8.11.2	States should ensure that, when selecting the materials to be used in the creation of artificial reefs as well as when selecting the geographical location of such artificial reefs, the provisions of relevant international conventions concerning the environment and safety of navigation are observed.	The use of artificial reef is not common in the Seychelles. In instances where large structures have been used to create artificial reefs, the locations have had to be approved by government.	3
8.11.3	States should, within the framework of coastal area management plan, establish management systems for artificial reefs and fish aggregation devices. Such management systems should require approval for the construction and deployment of such reefs and devices and should take into account the interests of fishers, including artisanal and subsistence fishers.	A FAD management plan has been approved for vessels fishing in Seychelles waters and is currently under implementation. There are however loopholes that exist for verifying whether regulations on maximum number of FADs deployed per boat is being adhered to.	3
8.11.4	States should ensure that the authorities responsible for maintaining cartographic records and charts for the purpose of navigation, as well as relevant environmental authorities, are informed prior to the placement or removal of artificial reefs or fish aggregation devices.	SFA has usually informed the relevant authorities of locations of anchored FADs. The Ministry responsible for environment has usually assumed this responsibility where artificial reefs are concerned.	3
Average score			3.00
ARTICLE 9 - AQUACULTURE DEVELOPMENT			
9.1 Responsible development of aquaculture, including culture-based fisheries, in areas under national jurisdiction			
9.1.1	States should establish, maintain and develop an appropriate legal and administrative framework which facilitates the development of responsible aquaculture.	SFA has worked on the development of a Mariculture Master Plan to facilitate the orderly development of the aquaculture sector. There is new legislation for aquaculture under preparation.	3
9.1.2	States should promote responsible development and management of aquaculture, including an advance evaluation of the effects of aquaculture development on genetic diversity and ecosystem integrity, based on the best available scientific information.	Through the Mariculture Master Plan SFA is planning the development of the mariculture sector. Only local species will be cultured. A full Social and Environmental Impact Assessment has been undertaken. Specific Environmental Impact Assessment is also planned for each individual mariculture project.	3
9.1.3	States should produce and regularly update aquaculture development strategies and plans, as required, to ensure that aquaculture development is ecologically sustainable and to allow the rational use of resources shared by aquaculture and other activities.	There are procedures in the Mariculture Master Plan to ensure regular update of aquaculture development strategies. However, the mariculture sector is yet in its infant stage of development.	2
9.1.4	States should ensure that the livelihoods of local communities, and their access to fishing grounds, are not negatively affected by aquaculture developments.	As part of the Mariculture Master Plan sites for individual mariculture zones have been identified to ensure that aquaculture development have minimal impact on fishing grounds.	3

9.1.5	States should establish effective procedures specific to aquaculture to undertake appropriate environmental assessment and monitoring with the aim of minimizing adverse ecological changes and related economic and social consequences resulting from water extraction, land use, discharge of effluents, use of drugs and chemicals, and other aquaculture activities.	The Mariculture Master Plan produced by SFA establishes procedures for environmental assessment and monitoring with the aim of minimizing adverse ecological changes.	3
Average score			3.00
9.2 Responsible development of aquaculture including culture-based fisheries within transboundary aquatic ecosystems			
9.2.1	States should protect transboundary aquatic ecosystems by supporting responsible aquaculture practices within their national jurisdiction and by cooperation in the promotion of sustainable aquaculture practices.	SFA has ensured that all aquaculture development occurs within the national jurisdiction far from the boundaries of other states so that all transboundary aquatic ecosystems are not impacted.	4
9.2.2	States should, with due respect to their neighbouring States and in accordance with International Law, ensure responsible choice of species, siting and management of aquaculture activities which could affect transboundary aquatic ecosystems.	SFA has prepared the Mariculture Master Plan that ensures that species to be cultured, sites for farms and other ground-based facilities have been identified well before hand and are known to all interested parties. These sites are far away from other states boundaries.	4
9.2.3	States should consult with their neighbouring States, as appropriate, before introducing non-indigenous species into transboundary aquatic ecosystems.	Through the Mariculture Master Plan SFA has introduced policies to ensure that only native species are cultured.	4
9.2.4	States should establish appropriate mechanisms, such as databases and information networks to collect, share and disseminate data related to their aquaculture activities to facilitate cooperation on planning for aquaculture development at the national, subregional, regional and global level.	Intensive aquaculture is yet to start in the Seychelles. However, SFA has formed a division to handle all issues concerning the aquaculture sector. This division will be responsible for ensuring that all data relating to aquaculture in the Seychelles will be collected and appropriately captured in databases and shared as required with national and regional partners.	2
9.2.5	States should cooperate in the development of appropriate mechanisms, when required, to monitor the impacts of inputs used in aquaculture.	SFA is yet to establish any mechanisms at the regional level to cooperate and monitor the impacts of inputs used in aquaculture.	1
Average score			3.00
9.3 Use of aquatic genetic resources for the purposes of aquaculture including culture-based fisheries			
9.3.1	States should conserve genetic diversity and maintain integrity of aquatic communities and ecosystems by appropriate management. In particular, efforts should be undertaken to minimize the harmful effects of introducing non-native species or genetically altered stocks used for aquaculture including culture-based fisheries into waters, especially where there is a significant potential for the spread of such non-native species or genetically altered stocks into waters under the jurisdiction of other States as well as waters under the jurisdiction of the State of origin. States should, whenever possible, promote steps to minimize adverse genetic, disease and other effects of escaped farmed fish on wild stocks.	Through the Mariculture Master Plan it has been agreed nationally that only species native to the Seychelles will be used in local mariculture activities.	3

9.3.2	States should cooperate in the elaboration, adoption and implementation of international codes of practice and procedures for introductions and transfers of aquatic organisms.	SFA is yet to establish any cooperation at the regional level concerning international codes of practice and procedures for introductions and transfers of aquatic organisms.	1
9.3.3	States should, in order to minimize risks of disease transfer and other adverse effects on wild and cultured stocks, encourage adoption of appropriate practices in the genetic improvement of broodstocks, the introduction of non-native species, and in the production, sale and transport of eggs, larvae or fry, broodstock or other live materials. States should facilitate the preparation and implementation of appropriate national codes of practice and procedures to this effect.	The Mariculture Master Plan and draft Mariculture regulations produced by SFA has components dealing with the codes of practice and procedures for the sale and transport of eggs, larvae or fry, broodstock or other live materials.	3
9.3.4	States should promote the use of appropriate procedures for the selection of broodstock and the production of eggs, larvae and fry.	The Mariculture Master Plan and draft Mariculture regulations produced by SFA details the procedures for the selection of broodstock and the production of eggs, larvae and fry.	3
9.3.5	States should, where appropriate, promote research and, when feasible, the development of culture techniques for endangered species to protect, rehabilitate and enhance their stocks, taking into account the critical need to conserve genetic diversity of endangered species.	Certain species which have been selected by SFA for aquaculture production in the Seychelles, e.g. <i>Epinephelus fuscoguttatus</i> , are considered as endangered and production of fry could help with the replenishment of the wild stock. However, no field activities along this line have been undertaken to date.	2
Average score			2.40
9.4 Responsible aquaculture at the production level			
9.4.1	States should promote responsible aquaculture practices in support of rural communities, producer organizations and fish farmers.	The Mariculture Master Plan produced by SFA revolves around responsible aquaculture practices. There are mechanisms within the plan to support producer organizations and fish farmers when large scale aquaculture starts.	4
9.4.2	States should promote active participation of fish farmers and their communities in the development of responsible aquaculture management practices.	Aquaculture industry is yet to take off in the Seychelles. Hence this measure is not assessed at this point.	NA
9.4.3	States should promote efforts which improve selection and use of appropriate feeds, feed additives and fertilizers, including manures.	The Mariculture Master Plan produced by SFA have sections which deals with best practices and standards for use of feeds, feed additives and fertilizers.	3
9.4.4	States should promote effective farm and fish health management practices favouring hygienic measures and vaccines. Safe, effective and minimal use of therapeutants, hormones and drugs, antibiotics and other disease control chemicals should be ensured.	The Mariculture Master Plan produced by SFA have sections that promotes effective farm and fish health management practices.	3
9.4.5	States should regulate the use of chemical inputs in aquaculture which are hazardous to human health and the environment.	The Mariculture Master Plan produced by SFA has components to regulate the use of chemical inputs in aquaculture. However, the Master Plan is yet to start implementation.	3

9.4.6	States should require that the disposal of wastes such as offal, sludge, dead or diseased fish, excess veterinary drugs and other hazardous chemical inputs does not constitute a hazard to human health and the environment.	The Mariculture Master Plan produced by SFA has components to regulate the disposal of waste, drugs and chemicals from the mariculture industry. However, the Master Plan is yet to start implementation.	3
9.4.7	States should ensure the food safety of aquaculture products and promote efforts which maintain product quality and improve their value through particular care before and during harvesting and on-site processing and in storage and transport of the products.	Seychelles does not currently have any aquaculture products for human consumption. However, there are measures in place that control processing, storage and transportation of food products.	2
Average score			3.00
ARTICLE 10 - INTEGRATION OF FISHERIES INTO COASTAL AREA MANAGEMENT			
10.1 Institutional framework			
10.1.1	States should ensure that an appropriate policy, legal and institutional framework is adopted to achieve the sustainable and integrated use of the resources, taking into account the fragility of coastal ecosystems and the finite nature of their natural resources and the needs of coastal communities.	SFA has been mandated as the one and only entity responsible for the management of Seychelles exploitable living marine resources. Policy in the fisheries sector is set by the Ministry of Fisheries and Agriculture and implemented by SFA with support of other agencies such as the Fish Inspection Unit of the Seychelles Bureau of Standards, The Ministry of Health and the Ministry of Environment, Energy and Climate Change. The Seychelles Sustainable Development Strategy steering committee was meant to have been pivotal in coordinating activities being undertaken by different sectors, however the committee was never established.	3
10.1.2	In view of the multiple uses of the coastal area, States should ensure that representatives of the fisheries sector and fishing communities are consulted in the decision-making processes and involved in other activities related to coastal area management planning and development.	SFA has representatives of the fisheries sector and fishing communities have been consulted as part of the decision making process concerning coastal area management planning, such as during the preparation of the Marine Spatial Plan, the Demersal Fisheries Management Plan and the Mariculture Master Plan. However, consultation tends to be project driven.	2
10.1.3	States should develop, as appropriate, institutional and legal frameworks in order to determine the possible uses of coastal resources and to govern access to them taking into account the rights of coastal fishing communities and their customary practices to the extent compatible with sustainable development.	The legal framework concerning the exploitation of marine living resources (Fisheries Act 2014) has recently been revised by the SFA to reflect modern changes approaches in fisheries management. The fishery is basically open access to the coastal communities. This open access nature is problematic as it does not exert enough control on output from the fisheries and is not compatible with sustainable fisheries management. However the Fisheries Act makes provision for SFA to prepare Fisheries Management Plan that can restrict access to marine living resources.	3
10.1.4	States should facilitate the adoption of fisheries practices that avoid conflict among fisheries resources users and between them and other users of the coastal area.	SFA has various measures in place to avoid conflict among fisheries resources users, such as areas reserved only for small scale fishing. However, there are still many conflicts among fishers and between fishers and other users of the coastal area (e.g. fishers and divers, fishers and inter-island cargo operators). In most cases legal	3

		framework are sufficient to deal with the conflict but requires stronger enforcement.	
10.1.5	States should promote the establishment of procedures and mechanisms at the appropriate administrative level to settle conflicts which arise within the fisheries sector and between fisheries resource users and other users of the coastal area.	There is no formal procedures which has been established by SFA to settle conflicts arising in the fisheries sectors. However, in cases where conflicts have arisen SFA has acted as mediators.	2
Average score			2.60
10.2 Policy measures			
10.2.1	States should promote the creation of public awareness of the need for the protection and management of coastal resources and the participation in the management process by those affected.	From SFA's side there has not been any long-term programme for public awareness of the need for the protection and management of coastal resources. Awareness has mostly been linked to individual projects and have been mostly short-term.	1
10.2.2	In order to assist decision-making on the allocation and use of coastal resources, States should promote the assessment of their respective value taking into account economic, social and cultural factors.	SFA and other national institutions have undertaken studies to determine the value of coastal resources. However, there has been no coordinated effort in such assessments.	1
10.2.3	In setting policies for the management of coastal areas, States should take due account of the risks and uncertainties involved.	SFA do not have a process to formally integrate risks and uncertainties in relation to the management of fisheries and fisheries related activities as part of coastal area management. Certain physical risks such as flooding, wave actions and tsunami are however considered in certain decision making. Risks in terms of resource exploitation are usually calculated as margins of error around the mean or median for catch of different species. However, these uncertainties are rarely considered while formulating policies.	1
10.2.4	States, in accordance with their capacities, should establish or promote the establishment of systems to monitor the coastal environment as part of the coastal management process using physical, chemical, biological, economic and social parameters.	SFA monitors the coastal environment through its catch assessment survey which monitor catch and effort in different fisheries. SFA has a long-term ocean temperature monitoring programme in place with automatic temperature loggers distributed around the inner islands. There are no chemical and social monitoring in place. There are instances where specific studies have focused on the social and economic well-being of fishermen and boat owners, such as the one commissioned by the CLISSA Project.	2
10.2.5	States should promote multidisciplinary research in support of coastal area management, in particular on its environmental, biological, economic, social, legal and institutional aspects.	SFA has been promoting research, however most of the research has focused on better understanding the biology of fisheries resources. There has been relatively little research done in other areas such as economic, social, legal and institutional aspects.	3
Average score			1.60

10.3 Regional cooperation			
10.3.1	States with neighbouring coastal areas should cooperate with one another to facilitate the sustainable use of coastal resources and the conservation of the environment.	SFA has been an active collaborator with regards to fisheries issues with neighbouring states either bilaterally, through the Indian Ocean Commission or the IOTC. However, there are many instances where the political will (agreements) have not been translated into actions on the field with many cooperation agreements being signed but little actual field collaboration taking place.	2
10.3.2	In the case of activities that may have an adverse transboundary environmental effect on coastal areas, States should: a) provide timely information and, if possible, prior notification to potentially affected States; b) consult with those States as early as possible.	Not directly relevant to the work of SFA. However, mechanism for such type of reporting to member states of the Indian Ocean Commission, Nairobi Convention and SADC, exist at the level of the Ministry of Foreign Affairs.	3
10.3.3	States should cooperate at the subregional and regional level in order to improve coastal area management.	Not directly relevant to the work of SFA. Coastal area management is coordinated through the Ministry of Environment, Energy and Climate Change. However, SFA actively participates in initiatives linked to coastal area management. Seychelles participate actively in regional coastal area management initiatives through the Indian Ocean Commission and the Nairobi Convention.	3
Average score			2.67
10.4 Implementation			
10.4.1	States should establish mechanisms for cooperation and coordination among national authorities involved in planning, development, conservation and management of coastal areas.	SFA has been active at the national level in the planning, development, conservation and management of coastal areas being represented on many boards and committees. On forum which could have played an important role in improving collaboration is the Marine Spatial Planning Steering Committee. There is also a steering committee for the implementation of the Seychelles Sustainable Development Strategy on which SFA has a sit but the committee is not functional at present.	2
10.4.2	States should ensure that the authority or authorities representing the fisheries sector in the coastal management process have the appropriate technical capacities and financial resources.	The SFA has represented the fisheries sector in the coastal management process. The staff of SFA has appropriate technical capacities and the institution have financial resources through government's budget and other funding mechanisms. However, budget is always an issue and there are demands for more budget. There is also a need to continually build technical capacity through a targeted training plan.	3
Average score			2.50

ARTICLE 11 - POST-HARVEST PRACTICES AND TRADE			
11.1 Responsible fish utilization			
11.1.1	States should adopt appropriate measures to ensure the right of consumers to safe, wholesome and unadulterated fish and fishery products.	Not directly relevant to the work of SFA. On the national level there are various structures that have been put in place to ensure the right of consumers to safe and unadulterated fishery products such as the Fair Trading Commission and The National Consumer Forum (NATCOF).	2
11.1.2	States should establish and maintain effective national safety and quality assurance systems to protect consumer health and prevent commercial fraud.	Not directly relevant to the work of SFA. There are structures in place by means of the Fish Inspection Unit and Ministry of Health for quality assurance of fish products and to reduce commercial fraud. However, there are few measures in place to prevent processed fish products from being mislabeled and misidentified and defraud consumers.	3
11.1.3	States should set minimum standards for safety and quality assurance and make sure that these standards are effectively applied throughout the industry. They should promote the implementation of quality standards agreed within the context of the FAO/WHO Codex Alimentarius Commission and other relevant organizations or arrangements.	Not directly relevant to the work of SFA. There are however quality standards in place which are enforced by the Fish Inspection Unit and the Ministry of Health.	3
11.1.4	States should cooperate to achieve harmonization, or mutual recognition, or both, of national sanitary measures and certification programmes as appropriate and explore possibilities for the establishment of mutually recognized control and certification agencies.	Not directly relevant to the work of SFA. However, Seychelles has put in place a Competent Authority that control and provide certification for fisheries products that are to be exported. There are also sanitary measures that are enforced by the Ministry of Health.	3
11.1.5	States should give due consideration to the economic and social role of the post-harvest fisheries sector when formulating national policies for the sustainable development and utilization of fishery resources.	SFA has in the later years put stronger emphasis on developing the value addition component of the fisheries sector with the construction of new units for fish processing and the allocation of land for construction of centralized cold storage facilities. National policies are geared towards local processing of a larger portion of the catch.	4
11.1.6	States and relevant organizations should sponsor research in fish technology and quality assurance and support projects to improve post-harvest handling of fish, taking into account the economic, social, environmental and nutritional impact of such projects.	SFA has allocated budget to support projects in fish technology and quality assurance and have organized trainings to teach fishers good post-harvest handling techniques.	3
11.1.7	States, noting the existence of different production methods, should through cooperation and by facilitating the development and transfer of appropriate technologies, ensure that processing, transporting and storage methods are environmentally sound.	Not directly relevant to the work of SFA. However, there are HACCP measures implemented by the Competent Authority and the Ministry of Health that forces fish processors and transporters to ensure that methods used are hygienic and environmentally sound. However, there are some small scale fishing practices that do not adhere to proper storage and transportation methods.	2

11.1.8	States should encourage those involved in fish processing, distribution and marketing to: a) reduce post-harvest losses and waste; b) improve the use of by-catch to the extent that this is consistent with responsible fisheries management practices; and c) use the resources, especially water and energy, in particular wood, in an environmentally sound manner.	There is no formal measures or guidelines which have been introduced by SFA to encourage actors involved in fish processing, distribution and marketing to reduce post-harvest losses and waste. However, new measures are encouraging the use of by-catch for value addition. Use of water and energy is kept in check as a result of their high cost.	2
11.1.9	States should encourage the use of fish for human, consumption and promote consumption of fish whenever appropriate.	The government through SFA has done a lot to encourage the use of fish for human consumption by providing subsidies to keep the price of fish on the local market low. However, a fairly recent report looking at cost and benefit of subsidies states that “ <i>Fish prices are set in international markets, and subsidies have not reduced the prices that Seychellois pay now.</i> ” However, apart from the subsidies not very much is being done to actively raise awareness of the health benefits of fish consumption.	2
11.1.10	States should cooperate in order to facilitate the production of value-added products by developing countries.	SFA clearly understands the economic opportunities that value addition of fish products will bring and is facilitating value addition through the construction of processing facilities for local entrepreneurs and making land available for construction of facilities that will support value addition. However, at present most of the value addition is being done without much collaboration among states. There are opportunities for stronger collaboration for knowledge transfer from other countries in the development of value added products from fish.	1
11.1.11	States should ensure that international and domestic trade in fish and fishery products accords with sound conservation and management practices through improving the identification of the origin of fish and fishery products traded.	SFA has supported labelling projects in the artisanal fishery and end users can trace individual fish down to the boat that captured it. However, SFA is still a long way off to ensure full traceability of products from its fisheries.	2
11.1.12	States should ensure that environmental effects of post-harvest activities are considered in the development of related laws, regulations and policies without creating any market distortions.	Post-harvest related activities can be very broad and the legal framework that concerns it stretches far beyond the area of concern for SFA. However, general laws exist to control possible impacts of post-harvest activities such as those controlling disposal of waste water, factory waste and discards at sea.	2
Average score			2.42
11.2 Responsible international trade			
11.2.1	The provisions of this Code should be interpreted and applied in accordance with the principles, rights and obligations established in the World Trade Organization (WTO) Agreement.	Not directly relevant to the work of SFA.	NA
11.2.2	International trade in fish and fishery products should not compromise the sustainable development of fisheries and responsible utilization of living aquatic resources.	SFA and the Seychelles Government has put in place measures when required irrespective of demand from international trade.	3

11.2.3	States should ensure that measures affecting international trade in fish and fishery products are transparent, based, when applicable, on scientific evidence, and are in accordance with internationally agreed rules.	Seychelles has ensured transparency when dealing with measures affecting international trade in fish and fishery products.	3
11.2.4	Fish trade measures adopted by States to protect human or animal life or health, the interests of consumers or the environment, should not be discriminatory and should be in accordance with internationally agreed trade rules, in particular the principles, rights and obligations established in the Agreement on the Application of Sanitary and Phytosanitary Measures and the Agreement on Technical Barriers to Trade of the WTO.	Seychelles have implemented measures to protect human and animal life, interest of consumers and the environment consistently according to internationally agreed trade rules. Sanitary and Phytosanitary Measures to ensure safety of fishery products are in place.	4
11.2.5	States should further liberalize trade in fish and fishery products and eliminate barriers and distortions to trade such as duties, quotas and non-tariff barriers in accordance with the principles, rights and obligations of the WTO Agreement.	SFA and Seychelles have eliminate barriers and distortions to trade in fish and fisheries products.	4
11.2.6	States should not directly or indirectly create unnecessary or hidden barriers to trade which limit the consumer's freedom of choice of supplier or that restrict market access.	Seychelles has promoted open trade in fish and fishery products and has promoted consumers freedom of choice and unrestricted market access.	3
11.2.7	States should not condition access to markets to access to resources. This principle does not preclude the possibility of fishing agreements between States which include provisions referring to access to resources, trade and access to markets, transfer of technology, scientific research, training and other relevant elements	Seychelles is a net exporter of fisheries products and is mostly seeking for international markets. The country does not condition access to market to access to resources.	4
11.2.8	States should not link access to markets to the purchase of specific technology or sale of other products.	Access to markets in the Seychelles is not linked to specific technology or sale of other products.	4
11.2.9	States should cooperate in complying with relevant international agreements regulating trade in endangered species.	Seychelles controls the international trade in endangered species. All species on the endangered species list requires a physical inspection and certificate for export.	4
11.2.10	States should develop international agreements for trade in live specimens where there is a risk of environmental damage in importing or exporting States.	Seychelles is currently not involved in the export of live fish specimens. There are however imports of live fish in the aquarium trade. Permits are required for importation.	3
11.2.11	States should cooperate to promote adherence to, and effective implementation of relevant international standards for trade in fish and fishery products and living aquatic resource conservation.	The Seychelles Government has put in place measures to implement relevant international standards for trade in fish and fishery products and living aquatic resource conservation. However, full traceability for most fishery products is not currently possible. There are however initiatives that are ongoing to promote traceability in the demersal hook and line fishery.	3

11.2.12	States should not undermine conservation measures for living aquatic resources in order to gain trade or investment benefits.	The Seychelles Government has continually put a lot of emphasis on the conservation of living aquatic resources, however, the demersal fisheries remains inadequately managed with certain species remaining under great threat from fishing.	3
11.2.13	States should cooperate to develop internationally acceptable rules or standards for trade in fish and fishery products in accordance with the principles, rights, and obligations established in the WTO Agreement.	Seychelles is a member of WTO and has collaborated with other states with regards to internationally acceptable rules and standards for trade in fish and fishery products.	3
11.2.14	States should cooperate with each other and actively participate in relevant regional and multilateral fora, such as the WTO in order to ensure equitable, non-discriminatory trade in fish and fishery products as well as wide adherence to multilaterally agreed fishery conservation measures.	SFA has been active at the regional level and has been a strong supporter of multilaterally agreed fishery conservation measures	4
11.2.15	States, aid agencies, multilateral development banks and other relevant international organizations should ensure that their policies and practices related to the promotion of international fish trade and export production do not result in environmental degradation or adversely impact the nutritional rights and needs of people for whom fish is critical to their health and wellbeing and for whom other comparable sources of food are not readily available or affordable.	As in other parts of the world, fisheries in Seychelles has been responsible for environmental degradation. There is however no proper research and monitoring framework in place to quantify the influence of fishing on environmental degradation observed. Some measures are however in place to reduce the effect of fishing on the natural environment such as restricting the use of certain types of gears and restricting catch by controlling the number of licenses.	2
Average score			3.36
11.3 Laws and regulations relating to fish trade			
11.3.1	Laws, regulations and administrative procedures applicable to international trade in fish and fishery products should be transparent, as simple as possible, comprehensible and, when appropriate, based on scientific evidence.	Laws and regulations with regards to international trade is under the auspices of the Department of Trade. Seychelles regulations for trade in fish and fishery products is considered to be simple and transparent.	4
11.3.2	States, in accordance with their national laws, should facilitate appropriate consultation with and participation of industry as well as environmental and consumer groups in the development and implementation of laws and regulations related to trade in fish and fishery products.	SFA has ensured that all legislations and regulations with regard to fisheries and fisheries product have a period of stakeholder review to allow for stakeholders to give their opinion. However, little has been done to raise awareness of stakeholders on new measures in legislations when these come into force. A particular example is the Fisheries Act (2014), which has a number of new elements but none of these have been formally presented to stakeholders so that they are aware of them.	3
11.3.3	States should simplify their laws, regulations and administrative procedures applicable to trade in fish and fishery products without jeopardizing their effectiveness.	SFA and the Government of Seychelles has ensured that laws, regulations and administrative procedures applicable to trade in fish and fishery products are written in a simplified and straight forward manner.	4

11.3.4	When a State introduces changes to its legal requirements affecting trade in fish and fishery products with other States, sufficient information and time should be given to allow the States and producers affected to introduce, as appropriate, the changes needed in their processes and procedures. In this connection, consultation with affected States on the time frame for implementation of the changes would be desirable. Due consideration should be given to requests from developing countries for temporary derogations from obligations.	Changes to legal requirements have usually been notified in advance and communicated to all stakeholders.	3
11.3.5	States should periodically review laws and regulations applicable to international trade in fish and fishery products in order to determine whether the conditions which gave rise to their introduction continue to exist.	Laws and regulations have not been periodically reviewed, but there has been no incidences were a lack of review has led to issues in international trade in fish and fishery products.	1
11.3.6	States should harmonize as far as possible the standards applicable to international trade in fish and fishery products in accordance with relevant internationally recognized provisions.	SFA and Seychelles has tend to utilize international standards established for international trade in fish and fishery products.	4
11.3.7	States should collect, disseminate and exchange timely, accurate and pertinent statistical information on international trade in fish and fishery products through relevant national institutions and international organizations.	SFA compiles information on catch of fishery products as well as information on exports and imports of such products into the country.	4
11.3.8	States should promptly notify interested States, WTO and other appropriate international organizations on the development of and changes to laws, regulations and administrative procedures applicable to international trade in fish and fishery products.	There has not been major changes in the regulations regarding international trade in fish and fishery products that SFA had needed to make known to interested states and WTO. However, there has been changes in administrative procedures which SFA has notified local agents.	3
Average score			3.25
ARTICLE 12 - FISHERIES RESEARCH			
12.1	States should recognize that responsible fisheries requires the availability of a sound .scientific basis to assist fisheries managers and other interested parties in making decisions. Therefore, States should ensure that appropriate research is conducted into all aspects of fisheries including biology, ecology, technology, environmental science, economics, social science, aquaculture and nutritional science. States should ensure the availability of research facilities and provide appropriate training, staffing and institution building to conduct the research, taking into account the special needs of developing countries.	SFA has put in place a research unit which undertakes research in various aspects of fisheries. However, at present mostly focusses on biology and ecology. There is a need to widen the research to cover other areas such as economics and social sciences. Facilities for research are available and staff are given opportunities to attend many training courses. SFA has a capacity building programme and is training its staff. However, the small group of researchers available at SFA cannot produce the volume of research that is required to inform effective management of the various fisheries.	2

12.2	States should establish an appropriate institutional framework to determine the applied research which is required and its proper use.	No institutional framework has been established by SFA to determine the applied research which is required and its proper use. There is however a scientific committee which has been set up to provide oversight to research and fisheries management. Lately, the scientific committee has not been meeting. Generally, research are dictated as per the requirement of the management plans and National Plans of Action (NPOA).	2
12.3	States should ensure that data generated by research are analyzed, that the results of such analyses are published, respecting confidentiality where appropriate, and distributed in a timely and readily understood fashion, in order that the best scientific evidence is made available as a contribution to fisheries conservation, management and development. In the absence of adequate scientific information, appropriate research should be initiated as soon as possible.	SFA has put some emphasis in ensuring that data collected are analyzed and published. This is done mostly through technical reports. Over the years there has been a number of peer-reviewed scientific papers published by SFA staff. Collaboration with other researchers and research institutes have helped in increasing the number of peer-reviewed publications on which SFA has collaborated.	3
12.4	States should collect reliable and accurate data which are required to assess the status of fisheries and ecosystems, including data on bycatch, discards and waste. Where appropriate, this data should be provided, at an appropriate time and level of aggregation, to relevant States and subregional, regional and global fisheries organizations.	SFA collects data from industrial fishing vessels on bycatch and discards. SFA has also deployed scientific observers on tuna purse seiners to independently collect data on bycatch, discards and fishing practices.	3
12.5	States should be able to monitor and assess the state of the stocks under their jurisdiction, including the impacts of ecosystem changes resulting from fishing pressure, pollution or habitat alteration. They should also establish the research capacity necessary to assess the effects of climate or environment change on fish stocks and aquatic ecosystems.	SFA has very little capacity to undertake stock assessment on fishery resources. SFA relies on the IOTC stock assessment experts for stock assessment relating to the tuna fisheries. For the demersal fisheries SFA has undertaken simple stock assessments in-house. In other cases, SFA has contracted stock assessment experts to undertake stock assessments. There is a need to train more SFA scientist in stock assessment techniques and to integrate stock assessments of different species as part of the annual work plan.	2
12.6	States should support and strengthen national research capabilities to meet acknowledged scientific standards.	Financial resources have been set aside at SFA to strengthen national research capabilities in research and many staff have benefitted from such trainings. There is however a need to train PhDs so that they can lead their own scientific projects.	3
12.7	States, as appropriate in cooperation with relevant international organisations, should encourage research to ensure optimum utilization of fishery resources and stimulate the research required to support national policies related to fish as food.	SFA allocates money each year for research project and has a Research Unit, laboratories and a research vessel to support scientists. Most research is however focused on the biology of fisheries species and there is little research work being done on fish as food apart from the development of new value added products for sale.	3

12.8	States should conduct research into, and monitor, human food supplies from aquatic sources and the environment from which they are taken and ensure that there is no adverse health impact on consumers. The results of such research should be made publicly available.	SFA has been involved with a long-term study looking at the effect of methyl-mercury from fish consumption on several cohorts of the population in one of the longest running study of its type in the world. Through collaboration with IRD, SFA has lately been looking at other possible toxins in sea food. Results are being published in peer-reviewed journals and results disseminated locally.	4
12.9	States should ensure that the economic, social, marketing and institutional aspects of fisheries are adequately researched and that comparable data are generated for ongoing monitoring, analysis and policy formulation.	Data on the economic aspects of fisheries are being kept by SFA. Less data are available on the marketing and institutional aspects of fisheries.	1
12.10	States should carry out studies on the selectivity of fishing gear, the environmental impact of fishing gear on target species and on the behaviour of target and non-target species in relation to such fishing gear as an aid for management decisions and with a view to minimizing non-utilized catches as well as safeguarding the biodiversity of ecosystems and the aquatic habitat.	SFA has undertaken limited studies on the selectivity of fishing gears and on the interaction of target and non-target species with fishing gears.	1
12.11	States should ensure that before the commercial introduction of new types of gear, a scientific evaluation of their impact on the fisheries and ecosystems where they will be used should be undertaken. The effects of such gear introductions should be monitored.	Over the years SFA has undertaken such scientific evaluation before the introduction of new fishing gears. However, the focus had been more on fisheries than ecosystem impacts. The latest gear tested was lobster pots.	2
12.12	States should investigate and document traditional fisheries knowledge and technologies, in particular those applied to small-scale fisheries, in order to assess their application to sustainable fisheries conservation, management and development.	Traditional fisheries knowledge have been documented by SFA. There is however a need to constantly review what type of information are available and where gaps might exist.	3
12.13	States should promote the use of research results as a basis for the setting of management objectives, reference points and performance criteria, as well as for ensuring adequate linkage, between applied research and fisheries management.	SFA has been supportive of the use of research results to set management objectives, reference points and performance criteria in the industrial tuna fisheries. It has also integrated reference points and performance criteria in the management plan for the demersal fishery operating over the Mahé Plateau. However, the current monitoring system does not allow for quick identification when reference points are reached.	3
12.14	States conducting scientific research activities in waters under the jurisdiction of another State should ensure that their vessels comply with the laws and regulations of that State and international law.	Thus far SFA has only conducted research only within its EEZ and international waters and has fully complied with national and international laws.	4
12.15	States should promote the adoption of uniform guidelines governing fisheries research conducted on the high seas.	SFA research has been undertaken mostly within the Seychelles EEZ. There are no propositions on guidelines governing fisheries research on the high seas. However, SFA is supportive of uniform guidelines for research.	2

12.16	States should, where appropriate, support the establishment of mechanisms, including, <i>inter alia</i> , the adoption of uniform guidelines, to facilitate research at the subregional or regional level and should encourage the sharing of the results of such research with other regions.	SFA has made no propositions on guidelines to facilitate research at the subregional and regional level.	NA
12.17	States, either directly or with the support of relevant international organizations, should develop collaborative technical and research programmes to improve understanding of the biology, environment and status of transboundary aquatic stocks.	SFA has collaborated extensively with IOTC and other research organisations interested in fisheries management in the region through collaborative technical and research programme to improve understanding of transboundary aquatic stocks. IRD remains one of the strong research partner.	3
12.18	States and relevant international organizations should promote and enhance the research capacities of developing countries, inter alia, in the areas of data collection and analysis, information, science and technology, human resource development and provision of research facilities, in order for them to participate effectively in the conservation, management and sustainable use of living aquatic resources.	SFA has put in a lot of resources in capacity building with staff encouraged to apply and attend formal international trainings in various areas dealing with fisheries. SFA is in fact one of the organization where staff gets a lot of opportunities to enhance their capacities regarding research. However, there is a need for capacity building to be driven by the organisations research needs.	3
12.19	Competent national organizations should, where appropriate, render technical and financial support to States upon request and when engaged in research investigations aimed at evaluating stocks which have been previously unfished or very lightly fished.	Not directly relevant to the work of SFA.	NA
12.20	Relevant technical and financial international organizations should, upon request, support States in their research efforts, devoting special attention to developing countries, in particular the least developed among them and small island developing countries.	Not directly relevant to the work of SFA.	NA
Average score			2.59

Annex II – Questionnaire used in Senior SFA Managers work satisfaction survey

SFA Senior Managers Work Satisfaction Survey

1. Overall, how satisfied are you working for SFA?

☐Extremely dissatisfied ☐Very dissatisfied ☐Somewhat dissatisfied ☐Neutral ☐Somewhat satisfied ☐Extremely satisfied

2. What I like best about working for SFA is ...

3. Things that can be done to make SFA a better workplace are ...

4. Please indicate the extent to which you agree with the following statements:

	Disagree Completely	Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree	Agree Completely	Disagree Completely
(a) SFA clearly conveys its mission to its employees.	☐	☐	☐	☐	☐	☐	☐	☐
(b) There is good communication from managers to employees.	☐	☐	☐	☐	☐	☐	☐	☐
(c) I have the right amount of staff I need to do my job	☐	☐	☐	☐	☐	☐	☐	☐
(d) I have the right quality of staff I need to do my job	☐	☐	☐	☐	☐	☐	☐	☐
(e) I have the tools and resources I need to do my job.	☐	☐	☐	☐	☐	☐	☐	☐
(f) I have the training I need to do my job	☐	☐	☐	☐	☐	☐	☐	☐

(g) I feel underutilized in my job.	☐	☐	☐	☐	☐	☐	☐	☐
(h) The amount of work expected of me is reasonable.	☐	☐	☐	☐	☐	☐	☐	☐
(i) It is easy to get along with my colleagues.	☐	☐	☐	☐	☐	☐	☐	☐
(j) The morale in my section is high.	☐	☐	☐	☐	☐	☐	☐	☐

5. Please indicate the extent to which you agree with the following statements:

	Disagree Completely	Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree	Agree Completely	Disagree Completely
(a) Overall, my supervisor does a good job.	☐	☐	☐	☐	☐	☐	☐	☐
(b) My supervisor promotes an atmosphere of teamwork.	☐	☐	☐	☐	☐	☐	☐	☐
(c) My supervisor provides me with actionable suggestions on what I can do to improve.	☐	☐	☐	☐	☐	☐	☐	☐
(d) When I have questions or concerns, my supervisor is able to address them.	☐	☐	☐	☐	☐	☐	☐	☐

6. How satisfied are you with ...

	Disagree Completely	Strongly Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Strongly Agree	Agree Completely	Disagree Completely
(a) your pay?	☐	☐	☐	☐	☐	☐	☐	☐
(b) your career progression at SFA thus far?	☐	☐	☐	☐	☐	☐	☐	☐
(c) benefits offered by SFA?	☐	☐	☐	☐	☐	☐	☐	☐
(d) Opportunities offered by SFA?	☐	☐	☐	☐	☐	☐	☐	☐
(e) the process used to determine pay rise?	☐	☐	☐	☐	☐	☐	☐	☐

7. Does your section have a well-articulated work plan with clear outputs and indicators? ☐ YES ☐ NO

8. If NO, why not?

9. Would you be supportive of the development of Key Performance Indicators against which you and your section is assessed on a yearly basis?

10. What are the limitations or issues that you can see with such a system?

11. How many years have you worked at SFA?

☐ < 1 year ☐ 1- 5 years ☐ 5 – 10 Years ☐ 10 – 15 years ☐ > 15 years

12. What is your gender? ☐ Male ☐ Female

Implementation of SFA Strategic Plan 2018 – 2020

Performance Measurement System

Goals	Strategies	Priority actions	Targets	Key Performance Indicators (KPIs)	Action by
Effective governance arrangements 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	1.1 Strengthen organizational planning and strategic management to improve service delivery.	- Update and modernize the Seychelles Fishing Authority (Establishment) Act.	- Seychelles Fishing Authority (Establishment) Act. Updated and gazette by December 2018.	- Availability of revised SFA Establishment Act by target date.	- Chief Executive Officer - Senior Legal Officer
		- Set up and operationalize a unit for project management.	- Operational unit set up and functioning by June 2019.	- New unit appearing on SFA organogram with at least 2 dedicated staff.	- Chief Executive Officer
		- Develop a business plan for SFA that includes a business development and change management unit.	- Business plan developed for SFA and approved by Board of Directors by December 2018.	- Availability of Business plan by target date and plan to set up and operationalize the Change Management Unit.	- Chief Executive Officer
		- Implement new organization structure for improved service delivery.	- New organization structure implemented by June 2019.	- New organizational structure implemented by target date.	- Chief Executive Officer - Director Human Resources and Administration
		- Develop and implement a succession plan.	- Succession Plan prepared and under implementation by December 2019.	- Succession Plan developed, approved and under implementation by target date.	- Director Human Resources and Administration
		- Introduce Key Performance Indicators (KPIs) for all sections, programmes and staff.	- All sections, programmes and staff having and assessed against approved Key Performance Indicators by December 2019.	- Percentage of sections, staff and programmes with clearly listed KPIs available by target date.	- Director Human Resources and Administration - Deputy Chief Executive Officer
		- Prepare and implement a 3-year annual rolling/action plan for all sections.	- Annual rolling plan for all sections prepared, implemented and first evaluated by August 2019.	- Percentage of sections with approved 3-year annual rolling plan under implement. - Percentage of activities identified for implementation in 2019 implemented.	- Deputy Chief Executive Officer
		- Design and introduce a simple more quantitative reporting systems.	- Templates for new quantitative reporting system available and in use by November 2019.	- Availability and popularity of use by sections of approved reporting template by target date.	- Deputy Chief Executive Officer

	1.2 Enhance the organization financial, administrative and risk management capability.	- Prepare and execute a plan for administrative and financial autonomy.	- Plan for implementation of administrative and financial autonomy approved and under execution by September 2018.	- Plan approved and under execution by target date.	- Chief Executive Officer
		- Establish and operationalize a performance evaluation unit.	- Performance Evaluation Unit set up and operational by June 2019.	- New unit appearing on SFA organogram with at least 2 dedicated staff.	- Director Human Resources and Administration
		- Strengthen internal control, performance audit and risk management capacity across the whole organization.	- Risk Management Plan and Programme drafted and under implementation by June 2019.	- Number of activities in Risk Management Plan under implementation by June 2019.	- Director Human Resources and Administration
		- Establish clear standards for service delivery.	- Standards for service delivery prepared and approved by SFA by June 2019.	- Approved standards for service delivery available by June 2019.	- Chief Executive Officer - Director Human Resources and Administration
		- Establish procedures for oversight by and reporting to the Board of Directors.	- Consultancy for preparation of documentation detailing procedures for Oversight completed by December 2018.	- Documentation of procedures for oversight being used by Board of Directors by target date.	- Chief Executive Officer
		- Establish procedures for reporting to the Ministry of Fisheries and Agriculture and other oversight agencies.	- Consultancy for preparation of documentation detailing procedures for Reporting completed by February 2019.	- Documentation of procedures for reporting to the Ministry of Fisheries and Agriculture and other oversight agencies submitted and in use by target date.	- Chief Executive Officer
	1.3 Close gaps in the legal framework and ensure that legislation meets the requirement for effective control of fisheries and aquaculture value chain.	- Review and update the Fisheries Act (2014) taking into account new developments across the fisheries and aquaculture value chain.	- Fisheries Act under review by December 2018.	- First draft of revised Fisheries Act available by December 2018.	- Senior Legal Officer
		- Revise and update the Fisheries Regulations (1991) in line with the new the Fisheries Act.	- Contract for consultancy for review of Fisheries Regulations signed by September 2018.	- First draft of revised Fisheries Regulations available by December 2018.	- Senior Legal Officer - Manager Monitoring, Control and Surveillance
	1.4 Improve compliance to fisheries regulations.	- Strengthen the Compliance unit's human capacity (linked to Goal 2)	- At least 2 new staff employed in Compliance Unit by June 2019.	- Percentage of new staff employed in relation to target by target date.	- Manager Monitoring, Control and Surveillance
		- Develop and implement new surveillance strategy and plan.	- New Surveillance Plan and Strategy developed and approved by June 2019.	- Plan available and approved by target date.	- Manager Monitoring, Control and Surveillance
		- Strengthen partnership with other enforcement agencies (local and regional) for	- Formal agreements for cooperation signed with at least 2 local law	- Percentage of formal agreements signed in relation to target.	- Manager Monitoring, Control and Surveillance

		exchange of surveillance information, joint sea/air patrols, decision making and capacity building.	enforcement agencies by December 2019.		
		- Develop and implement a public participation plan including incentives to report fisheries-related crimes.	- Public participation plan prepared and approved by June 2019.	- Plan available and approved by target date.	- Manager Monitoring, Control and Surveillance
		- Increase VMS coverage to cover all fishing vessels inclusive of those involved in the sports fishery.	- 75% of all fishing vessels concerned equipped with VMS by December 2020.	- Percentage of fishing vessels equipped with functional VMS system in relation to target by December 2020.	- Manager Monitoring, Control and Surveillance
Institutional strengthening of SFA Improve institutional infrastructure, build core competencies and strengthen the internal procedures of SFA to build and inspire human capacity for better service delivery.	2.1 Improve infrastructure to provide for conducive working environment for staff.	- Improve existing and build new offices, scientific and support facilities.	- Master plan for improvement of office and scientific support facilities submitted and approved by June 2019.	- Master Plan approved and under implementation by June 2019.	- Chief Executive Officer - Manager Projects
		- Improve existing and acquire new fisheries research and enforcement vessels.	- Plan for improving existing research and enforcement vessels completed and approved by June 2019. - Modalities for acquiring new research and enforcement vessels completed by June 2019.	- Plan for improving existing research and enforcement vessels approved by target date. - Modalities for acquiring new research and enforcement vessels agreed and finalized by target date.	- Manager Research - Manager Monitoring, Control and Surveillance
		- Replace and expand the existing fleet of vehicles to improve service delivery.	- 1 new vehicle in 2018 and at least 2 new vehicles purchased per year in 2019 and 2020.	- Percentage of vehicles purchased in relation to target for the year 2018, 2019 and 2020.	- Director Human Resources and Administration
	2.2 Build core competencies across the organization required for execution of organizational mandates.	- Undertake detailed capacity needs assessment.	- Contract for detailed capacity needs assessment signed by December 2018 and assignment completed by April 2019.	- Capacity needs assessment report completed and available by target date.	- Director Human Resources and Administration
		- Set-up and implement a targeted capacity building programme to improve service delivery.	- Plan for targeted capacity building programme prepared, approved and communicated to all staff by June 2019.	- Availability of approved plan by target date.	- Director Human Resources and Administration
		- Establish strategic partnerships with local and international scientific research, fisheries enforcement and other institutions.	- At least 6 new research and fisheries enforcement initiatives being implemented jointly by SFA and international strategic partners by December 2020.	- Number of new research and fisheries enforcement initiatives being implemented jointly by SFA and international strategic partners in relation to target by target date.	- Deputy Chief Executive Officer - Manager Research - Manager Monitoring, Control and Surveillance

		- Introduce new employee scheme of service.	- New employee scheme of service finalized and under implementation by December 2019.	- New employee scheme of service under implementation by target date.	- Director Human Resources and Administration
	2.3 Enhance the quality of services provided and facilitate the decision making process through more effective use of Information and Communication Technology.	- Undertake detailed ICT needs assessment.	- ICT needs assessment undertaken by manager responsible for by June 2019.	- Completion of ICT needs assessment by target date.	- Director Information Technology
		- Improve existing and acquire new ICT infrastructure.	- New ICT infrastructure identified and procurement plan finalized by September 2019.	- New ICT infrastructure in place and functioning by June 2020.	- Director Information Technology
		- Introduce online administrative, finance, procurement, verification and business continuity systems.	- All systems softwares purchased, installed and in use by June 2019.	- Percentage of required system softwares which have been installed and are in use against target.	- Director Information Technology - Manager Procurement
		- Maintain an updated online searchable database of publications in SFA's documentation center.	- Database of publication in SFA's Documentation Centre available for use on at least 90% of the days from 2019. - All new publications received updated in the database within 3 months of receipt by June 2019.	- Number of days per year that online database is available for use against target. - Percentage of publications received which have been updated in the database by target date.	- Director Information Technology - Documentation Officer
	2.4 Build a strong organization image and improve public awareness.	- Develop and implement a Communication and public relations strategy.	- Communication and public relations strategy completed and under implementation by June 2019. - At least 75% of communication and public relation activities planned for each year implemented.	- Number of activities in Communication and public relation strategy implemented per year against target. - Percentage of communication and public relation activities implemented for each year against target.	- Chief Executive Officer - Communications Officer
		- Recruit personnel and acquire equipment, materials and infrastructure.	- At least one qualified staff recruited to coordinate implementation of Communication and public relations strategy by June 2019. - All identified required materials and infrastructure for implementation of annual work plan as part of the Communication and	- Qualified staff recruited by target date. - Percentage of identified materials and infrastructure purchased annually.	- Director Human Resources and Administration

			public relations strategy purchased.		
		- Build linkages with ICT platforms.	- At least three ICT related tools for communication and public relations in use by June 2020.	- Number of ICT related tools for communication and public relations against target in use by target date.	- Communications Officer - Director Information Technology
Ensure the sustainability of fisheries resources 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 and global developments.	3.1 Ensure that all fisheries and related industry are sustainable and economically viable through enhanced planning, performance evaluation and stakeholders' participation.	- Integrate eco-system based and co-management approaches in all fisheries resource management initiatives	- All new fisheries resource management initiatives have activities addressing eco-system based and co-management approaches by December 2019.	- Percentage of new fisheries resource management initiatives having successfully integrated eco-system based and co-management approaches.	- Manager Fisheries Management
		- Formulate management plans, which includes biological, economic and social aspects, for all local commercial fisheries.	- At least one Management plan produced per year for commercial fisheries as of 2019.	- Local commercial fisheries having approved management plans in relation to target.	- Manager Fisheries Management
		- Institutionalize stakeholders' engagement in fisheries resource management.	- New SFA Policy on stakeholders' engagement in fisheries resource management prepared and approved by December 2019.	- Approved SFA Policy on stakeholder's engagement in fisheries resource management available by target date.	- Chief Executive Officer - Manager Fisheries Management
		- Introduce measures to mitigate impacts to by-catch in the tuna fisheries	- At least one new measure introduced to mitigate impacts to by-catch in the tuna fisheries introduced by December 2019.	- Number of measures introduced by December 2019 in relation to target.	- Manager Fisheries Management
		- Introduce harvest strategies for vulnerable commercially targeted species.	- At least two harvest strategies for vulnerable commercially targeted species introduced by December 2020.	- Number of harvest strategies introduced by December 2020 in relation to target.	- Manager Fisheries Management
		- Undertake annual review of performance of all management measures in place.	- Annual review of performance of all management measures in place undertaken for the year 2018 and 2019 by December 2020. - Review of performance of implemented	- Number of annual reviews undertaken by target date.	- Manager Fisheries Management
		- Undertake an economic assessment of on-going fisheries activities.	- Technical report on economic assessment of on-going fisheries activities completed by December 2019.	- Availability of technical report by target date.	- Chief Economist

	3.2 Develop fisheries and aquaculture infrastructure in line with emerging priorities while ensuring sustainability.	- Prepare an infrastructure development plan which is in line with fisheries and aquaculture management and sector development plans.	- Infrastructure development plan prepared and approved by SFA by June 2019.	- Infrastructure development plan under implementation by June 2019.	- Chief Executive Officer - Manager Projects
		- Prioritize infrastructure development that promotes development of new fisheries, aquaculture, local processing and value addition.	- Priority list of infrastructure developments targeting the development of new fisheries, local processing and value addition prepared and available in infrastructure development plan by June 2019.	- Prioritized list of infrastructure developments targeting the development of new fisheries, local processing and value addition available in infrastructure development plan by target date.	- Manager Projects - Manager Post Harvest Development - Manager Aquaculture
		- Develop research and development facilities to support sustainable and economically viable aquaculture developments.	- Research and development facilities supporting sustainable and economically viable mariculture developments identified and budget assigned by December 2019.	- Number of development facilities supporting sustainable and economically viable mariculture developments for which budgets have been assigned by target date.	- Manager Aquaculture
		- Facilitate and support the construction of regional fisheries and aquaculture facilities.	- Regional fisheries and aquaculture facilities requiring construction identified and slotted for construction by June 2019.	- List of regional fisheries and aquaculture facilities requiring construction identified and slotted for construction available by June 2019.	- Manager Aquaculture
	3.3 Improve understanding of fisheries, fisheries resources and the ecosystems that supports fisheries through targeted research and surveys.	- Prepare a research plan based on fisheries management plans and priorities.	- Research plan prepared and budget assigned by December 2018.	- Availability of approved research plan by January 2019.	- Manager Research
		- Develop and implement stock assessment plan for each fishery.	- Stock assessment Plan for at least 3 artisanal fisheries under implementation by December 2020.	- Number of stock assessment plans for artisanal fisheries under implementation by December 2020 in relation to target.	- Manager Fisheries Management
		- Strengthen quality control and breadth of fisheries monitoring and extend fisheries monitoring to include sports fishery.	- Proposal to strengthen quality control and for increasing the breath of fisheries monitoring prepared by December 2019.	- Approved proposal for to strengthen quality control and for increasing the breath of fisheries monitoring available by target date.	- Manager Fisheries Management
		- Support the development of community-based data collection programmes.	- At least one community-based data collection programme supported by SFA by December 2020.	- Number of community-based data collection programme under implemented by December 2020 in relation to target.	- Chief Statistician

		- Agree on priorities and prepare action plans for collaboration with international research partners.	- Research priorities for collaboration with international partners agreed and approved by SFA by December 2018. - Annual plan of work for implementation with international partners prepared and implemented by March of each year from 2019.	- Availability of list of research priorities by target date. - Approved annual collaborative research work plan available by March of each year starting from 2019.	- Manager Research
Optimize the economic and social benefits of fisheries Ensure that the fisheries sector continues to play a key role in the economic development of the country and the socio-economic well-being of the Seychellois nation.	4.1 Promote Port Victoria as the hub of the Indian Ocean tuna fishery.	- Facilitate the improvement of on-shore facilities for disembarkation, storage, value addition and transshipment of tuna in Port Victoria.	- Strategy to facilitate improvement of onshore facilities in Port Victoria completed by December 2019.	- Approved strategy completed by target date.	- Chief Executive Officer - Business Development Officer
		- Facilitate development of infrastructures to cater for the needs of industrial and semi-industrial long liners.	- List and possible locations of infrastructures required to cater for the needs of industrial and semi-industrial long liners identified and available at SFA by March 2019.	- List and possible locations of infrastructures available by target date.	- Manager Projects
		- Facilitate the development of services supporting the fishing industry.	- List of services supporting the fishing industry that SFA could facilitate prepared and strategy prepared to facilitate them by August 2019.	- List of services and strategy to facilitate development of these services available by target date.	- Manager Infrastructure and Properties
		- Identify and facilitate the development of new services for fishing industry in partnership with stakeholders.	- Short consultancy to identify required services awarded by November 2018. - Stakeholders' workshop to discuss results organized by March 2019.	- Technical report resulting from contract implementation available by target date.	- Manager Infrastructure and Properties - Business Development Officer
	4.2 Increase the national economic gains from fisheries.	- Promote economic viability within the artisanal fisheries.	- Strategic document on road map to increase economic viability within the artisanal fisheries prepared by August 2019.	- Strategic document to increase economic viability within the artisanal fisheries approved by target date.	- Manager Fisheries Management - Manager Infrastructure and Properties - Chief Economist
		- Analyze alternatives for increasing resource rent in the tuna fishery.	- Technical report prepared on options for increasing resource rent in the tuna fishery prepared and	- Approved report available by target date.	- Deputy Chief Executive Officer - Manager Fisheries Management

			approved by December 2019.		
		- Strengthen the capacity to collect and analyze socio-economic data for all fisheries.	- New strategy and programme to strengthen SFA's capacity to collect and analyze socio-economic data for all fisheries prepared and approved by December 2018.	- Approved strategy and programme to strengthen SFA's capacity to collect and analyze socio-economic data for all fisheries available by December 2018.	- Chief Economist
		- Develop a plan to improve benefits from the value chain for local fisheries products.	- Plan prepared in consultation with stakeholders by October 2019.	- Availability of approved plan by target date.	- Chief Economist
	4.3 Support and facilitate the development of new fisheries, aquaculture, value addition, and marketing and encourage diversification.	- Identify necessary facilities required for value addition activities.	- List of facilities required for value addition activities compiled by SFA manager responsible for value addition issues by December 2018.	- Availability of approved list of identified facilities available by target date.	- Manager Post Harvest Development
		- Support the private sector in the development of new value added products according to market needs.	- At least three value added products developed in collaboration with the private sector by December 2020.	- Number of value added products developed in relation to target.	- Manager Post Harvest Development
		- Promote development of seafood certification schemes for high-end markets.	- At least one seafood certification scheme supported by SFA by December 2020.	- Number of seafood certification scheme supported by SFA between 2018 and 2020 in relation to target.	- Manager Post Harvest Development
		- Support the development of the aquaculture sector.	- SFA's plan to support the development of the aquaculture sector finalized and approved by June 2019.	- Plan development of the aquaculture sector finalized and approved by target date.	- Manager Aquaculture
	4.4 Formalization of the small-scale fisheries sector through appropriate policies and support to fishermen's associations, boat owners and fisher.	- Promote the development and sound management of fishermen associations.	- Prepare guidelines on sound management and operational practices for management of fishermen associations by September 2019.	- Guidelines available and approved by SFA by target date.	- Manager Fisheries Management - Fisheries Liaison Officer
		- Introduce compulsory registration of all full time and part time fishermen.	- Gazette new legislation under the Fisheries Act requiring the compulsory registration of all full-time and part-time fishermen by September 2019.	- New legislation gazette by September 2019 and 95% of all active fishermen registered by December 2019.	- Senior Legal Officer - Manager Fisheries Management
		- Harmonize the processes for issuing of licenses to include	- Agreement in place with the Seychelles Maritime Safety Administration on safety	- Agreement in place by target date.	- Manager Fisheries Management

		health, safety and security aspects for boats and fishers.	measures to include in regulations for annual renewal of fishing boat licenses by June 2019.		- Manager Monitoring Control and Surveillance
4.5 Encourage consumption of local fish and fisheries products and ensure the freshness of produce reaching the local market.		- Raise awareness of the local population on the nutritional benefits of fish consumption.	- Awareness plan on the nutritional benefits of fish consumption prepared by January 2019 and fully implemented by December 2020.	- Percentage of activities in awareness plan fully implemented by target date.	- Manager Post Harvest Development - Communications Officer
		- Support initiatives to make species such as tuna, by-catch from the tuna fishery and other under-valued fish species more accessible on the local market.	- At least two initiatives to make species such as tuna, by-catch from the tuna fishery and other under-valued fish species more accessible on the local market supported by SFA by December 2020.	- Number of initiatives supported by SFA in relation to target.	- Manager Post Harvest Development - Manager Fisheries Management
		- Organize post-harvest handling training for fishermen and people working in fish processing plants.	- At least two post-harvest handling training organized per year between 2018 and 2020.	- Number of post-harvest handling training organized per year between 2018 and 2020 in relation to target.	- Manager Post Harvest Development



Seychelles Fishing Authority

Strategic Plan 2018 - 2020

Our mandates

Promote, organize and develop fishing, fishing industries and fishing resources in Seychelles

Assist in the formulation of the national policy with respect to fishing, fishing industries and fishing resources and in the implementation of that policy

Identity the manpower training requirements of Seychelles with regard to fishing and fishing industries

Conduct negotiations, or engage in meetings, seminars or discussions, with regard to fishing or fisheries or the establishment or operation of fishing industries, whether at a national or international level, on behalf of the Republic or otherwise

Our vision

Excellence in sustainable fisheries management and development.

Our mission

To ensure optimal utilization of the fisheries resources for the benefit of the Seychellois people through sustainable management, ecosystem-based approaches and integrated development.

Our values

Integrity & professionalism: Work with highest level of professional ethics, responsibility and respect to gain the trust of our constituents.

Leadership: Consistently leading the way by empowering and developing staff to own and drive work programs.

Inclusiveness & team work: Promote team work, engage our co-workers and stakeholders and valorize the diversity of our workforce and stakeholders while working towards common results.

Equity: Be fair and provide equal opportunity to present and future generations.

Adaptability: Be proactive and flexible in our approaches and make use of best available science and technology to execute our duties in line with the social and economic priorities.

Stewardship: Promote sustainable resource management and ecosystem-based approaches among all stakeholders.

Our goals

Goal 1: Effective governance arrangements: 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.

Goal 2: Institutional strengthening of SFA: Improve institutional infrastructure, build core competencies and strengthen the internal procedures of SFA to build and inspire human capacity for better service delivery.

Goal 3: Ensure the sustainability of fisheries resources: 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 and global developments.

Goal 4: Optimize the economic and social benefits of fisheries: Ensure that the fisheries sector continues to play a key role in the sustainable development of the country and the socio-economic well-being of the Seychellois nation.

Our strategies

Goal 1: Effective governance arrangement

Strategy 1.1: Strengthen organizational planning and strategic management to improve service delivery.

- Update and modernize the Seychelles Fishing Authority (Establishment) Act.
- Set up and operationalize a unit for project management.
- Develop a business plan for SFA that includes a business development and change management unit.
- Implement new organization structure for improved service delivery.
- Develop and implement a succession plan.
- Introduce Key Performance Indicators (KPIs) for all sections, programmes and staff.
- Prepare and implement a 3-year annual rolling plan for all sections.
- Design and introduce a simple more quantitative reporting systems.

Strategy 1.2 Enhance the organization financial, administrative and risk management capability.

- Prepare and execute a plan for administrative and financial autonomy.
- Establish and operationalize a performance evaluation unit.
- Strengthen internal control, performance audit and risk management capacity across the whole organization.
- Establish clear standards for service delivery.
- Establish procedures for oversight by and reporting to the Board of Directors.
- Establish procedures for reporting to the Ministry of Fisheries and Agriculture and other oversight agencies.

Strategy 1.3: Close gaps in the legal framework and ensure that legislation meets the requirement for effective control of fisheries and aquaculture value chain.

- Review and update the Fisheries Act (2014) taking into account new developments across the fisheries and aquaculture value chain.
- Revise and update the Fisheries Regulations (1991) in line with the new the Fisheries Act.

Strategy 1.4: Improve compliance to fisheries regulations.

- Strengthen the Compliance unit's human capacity
- Develop and implement new surveillance strategy and plan.
- Strengthen partnership with other enforcement agencies (local and regional) for exchange of surveillance information, joint sea/air patrols, decision making and capacity building.
- Develop and implement a public participation plan including incentives to report fisheries-related crimes.
- Increase VMS coverage to cover all fishing vessels inclusive of those involved in the sports fishery.

Goal 2: Institutional strengthening of SFA

Strategy 2.1: Improve infrastructure to provide for conducive working environment for staff.

- Improve existing and build new offices, scientific and support facilities.
- Improve existing and acquire new fisheries research and enforcement vessels.
- Replace and expand the existing fleet of vehicles to improve service delivery.

Strategy 2.2: Build core competencies across the organization required for execution of organizational mandates.

- Undertake detailed capacity needs assessment.
- Set-up and implement a targeted capacity building programme to improve service delivery.
- Establish strategic partnerships with local and international scientific research, fisheries enforcement and other institutions.
- Introduce new employee scheme of service.

Strategy 2.3: Enhance the quality of services provided and facilitate the decision making process through more effective use of Information and Communication Technology.

- Undertake detailed ICT needs assessment.
- Improve existing and acquire new ICT infrastructure.
- Introduce online administrative, finance, procurement, verification and business continuity systems.
- Maintain an updated online searchable database of publications in SFA's documentation center.

Strategy 2.4: Build a strong organization image and improve public awareness.

- Develop and implement a Communication and public relations strategy.
- Recruit personnel and acquire equipment, materials and infrastructure.
- Build linkages with ICT platforms.

Goal 3: Ensure sustainability of fisheries resources

Strategy 3.1: Ensure that all fisheries and related industry are sustainable and economically viable through enhanced planning, performance evaluation and stakeholders' participation.

- Integrate eco-system based and co-management approaches in all fisheries resource management initiatives.
- Formulate management plans, which includes biological, economic and social aspects, for all local commercial fisheries.
- Institutionalize stakeholders' engagement in fisheries resource management.

- Introduce measures to mitigate impacts to by-catch in the tuna fisheries.
- Introduce harvest strategies for vulnerable commercially targeted species.
- Undertake annual review of performance of all management measures in place.
- Undertake an economic assessment of on-going fisheries activities.

Strategy 3.2: Develop fisheries and aquaculture infrastructure in line with emerging priorities while ensuring sustainability.

- Prepare an infrastructure development plan which is in line with fisheries and aquaculture management and sector development plans.
- Prioritize infrastructure development that promotes development of new fisheries, aquaculture, local processing and value addition.
- Develop research and development facilities to support sustainable and economically viable aquaculture developments.
- Facilitate and support the construction of regional fisheries aquaculture facilities.

Strategy 3.3: Improve understanding of fisheries, fisheries resources and the ecosystems that supports fisheries through targeted research and surveys.

- Prepare a research plan based on fisheries management plans and priorities.
- Develop and implement stock assessment plan for each fishery.
- Strengthen quality control and breadth of fisheries monitoring and extend fisheries monitoring to include sports fishery.
- Support the development of community-based data collection programmes.
- Agree on priorities and prepare action plans for collaboration with international research partners.

Goal 4: Optimize the economic and social benefits of fisheries

Strategy 4.1: Promote Port Victoria as the hub of the Indian Ocean tuna fishery.

- Facilitate the improvement of on-shore facilities for disembarkation, storage, value addition and transshipment of tuna in Port Victoria.
- Facilitate development of infrastructures to cater for the needs of industrial and semi-industrial long liners.
- Facilitate the development of services supporting the fishing industry.
- Identify and facilitate the development of new services for fishing industry in partnership with stakeholders.

Strategy 4.2: Increase the national economic gains from fisheries.

- Promote economic viability within the artisanal fisheries.
- Analyze alternatives for increasing resource rent in the tuna fishery.
- Strengthen the capacity to collect and analyze socio-economic data for all fisheries.
- Develop a plan to improve benefits from the value chain for local fisheries products.

Strategy 4.3: Support and facilitate the development of new fisheries, aquaculture, value addition, marketing and encourage diversification.

- Identify necessary facilities required for value addition activities.
- Support the private sector in the development of new value added products according to market needs.
- Promote development of seafood certification schemes for high-end markets.
- Support the development of the aquaculture sector.

Strategy 4.4: Formalization of the small-scale fisheries sector through appropriate policies and support to fishermen's associations, boat owners and fisher.

- Promote the development and sound management of fishermen associations.
- Introduce compulsory registration of all full time and part time fishermen.
- Harmonize the processes for issuing of licenses to include health, safety and security aspects for boats and fishers.

Strategy 4.5: Encourage consumption of local fish and fisheries products and ensure the freshness of produce reaching the local market

- Raise awareness of the local population on the nutritional benefits of fish consumption.
- Support initiatives to make species such as tuna, by-catch from the tuna fishery and other under-valued fish species more accessible on the local market.
- Organize post-harvest handling training for fishermen and people working in fish processing plants.



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