



**Santa Lucia:**

**National Fisheries Plan**

**Date: February 2013**

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## **1. BACKGROUND**

The Government of Saint Lucia is committed to the effective and efficient management of a fisheries sector that is comprised of wild caught fisheries and aquaculture as well as ancillary services such as processing, marketing and distribution, which are centred around the public sector, private sector and consumers. Sustainably managed fisheries are a cornerstone of the National economy; providing jobs, food security and business opportunities, particularly for those of us that live in coastal communities and have traditionally derived our sustenance and livelihood from the sea. For the rest of us, the fishery sector is the number one provider of nationally produced protein; the fish is harvested from resources found in our national waters and it is our responsibility along with our neighbours who share many of the stocks to ensure that these are fished responsibly.

The need for sustainable use of fishery resources and to ensure their availability for future generations is emphasized by the trends of globalization, global climate change, economic uncertainty and growing pressure on limited resources. We must have a strategy that will, among other things, bring about sustainable and cost effective fishing practices, enhanced fishers' skills, increased compliance, improved fisheries enforcement, and the maximisation of the sustainable earnings from the fisheries sector.

The Department of Fisheries (DOF) is mandated with responsibility for the development and sustainable management of the fisheries sector in St. Lucia. In recent years, its activities have been guided by the objectives and goals identified in the 2006 Fisheries Management Plan (FMP)<sup>1</sup> and the Fisheries Strategic Plan of 2008.<sup>2</sup> The latter provided DOF with direction to improve the implementation of its work programme and meet its mandate, vision and mission for the five year period ending 2012.

The time is now right to draw together the goals and objectives encompassed in those two documents to develop a Strategic approach to meeting the vision of St. Lucians for their fisheries sector in 2022. This approach must reflect a number of basic concepts: we must work with other countries in the Region to ensure that our fish resources are not over-fished; there is a limit to the number of boats and fishers who may profitably harvest the available resources; we must consider the potential for aquaculture; the economic value of the sector may be greatly increased by related activities in such as processing, distribution, vessel repairs and maintenance; and we have to take into account the potential adverse impacts on the fishery sector from external influences, most notably global climate change, pollution and shipping.

## **2. PURPOSE**

This National Fisheries Plan (*Plan*) is the response of St Lucia to the challenge of ensuring the sustainable use of its natural resources in the context of ecosystem protection and support of the long term interests of fishery dependent people through the development of actions that maximise sustainable economic, financial and social benefits. The *Plan* presents a strategic approach to the challenge of maximizing the Nation's long term returns from its renewable fishery resources in the

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<sup>1</sup> DoF 2006 Plan for the Management of the Fisheries of Saint Lucia

<sup>2</sup> DOF 2008 Sustainability of our Fisheries Sector Strategic Plan (2008–20123)

context of domestic, regional and global conditions. It defines the objectives of National Fisheries Policy (*Policy*) together with a Vision and Mission, before going on to address the National Fisheries Strategy (*Strategy*) that presents a road map on the implementation of the *Policy* and identifies the results to be achieved and broad actions to be undertaken within the period of the *Plan*. Subsequently, DFO will drive cooperative efforts by all stakeholders to follow the road map provided by the *Strategy* with the drawing-up of detailed activities and tasks in a multi-annual National Operational Plan (NOP) that identifies prioritized and sequenced projects in a work plan defined on the basis of the available financial and human resources.

A chief concern is to sustain fisheries as an economic sector that creates employment and income over the medium to long term. We do not look for short term gains that are not maintainable. This approach fits with the sustainable use of the available fishery resources; although environmental considerations go beyond the status of the targeted species by considering sustainability in a wider sense; looking at the potential indirect impacts of fisheries on other elements of the ecosystem.

Today our fisheries sector is largely informal; our aim is to create and maintain durable formal employment in a broad fisheries sector that provides meaningful, dignified and safe jobs.

The rational use and responsible management of our fishery resources will not respond to all of the issues facing St Lucia, but it will contribute to the welfare of fishers and other workers in the sector, their families and their communities. Working with our neighbours and other countries in the Region, we have the obligation to protect the natural renewable resources found in our waters that provide so many benefits to all St Lucians. This leads to a second main point and that is successful implementation of the *Plan* calls for all stakeholders to assume responsibilities and actively collaborate in a private sector and public sector partnership. In addition, we must work closely with other countries both directly and through other regional organisations to ensure the sustainability of shared stocks.

### **3. THE STRATEGIC PLANNING PROCESS**

DOF requested the assistance of the European Union's (EU) project *Strengthening Fisheries Management in ACP<sup>3</sup> Countries* to draft the *Plan*, and from October thru December of 2012 a Consultant worked with a DOF technical team that comprised staff from the individual specialist units.

DOF and others have a wide range of data and information and analysis of this provided a strong understanding of the context of the sector.

This was supported by two specific activities. Firstly, reflecting that a critical part of the approach is full consultation with stakeholders, in October, 2012 three workshops (Vieux Fort, Soufrière and Castries) were held to give fishers and others involved in the fishery sector the opportunity to identify issues that should be taken into consideration in the preparation of the *Plan*. Those issues were presented within a problem tree to facilitate the identification of the root causes and highlight the different policy areas requiring attention. Secondly, key persons within the sector were interviewed to provide a basis for in-depth analysis of the Institutions within the sector. If DOF and other institutions are to assume an important role in the implementation of the *Plan* there must be a thorough understanding of their capacities and capabilities; institutional weaknesses should not negatively impact *Plan* delivery.

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<sup>3</sup> African, Caribbean and Pacific

In early-December, 2012, the draft *Plan* was presented to stakeholders in a validation workshop held in Castries. On the basis of the comments received, the *Plan* was finalised by the technical team and the Consultant.

This document covers the *Policy* and the *Strategy*; the NOP will be defined according to the identified priorities and the available resources. The all-important task of monitoring and evaluating (M&E) will identify achievements and short comings. DOF personnel will be tasked with oversight of *Plan* implementation through to identify where the approach must change.

It is stressed that the *Plan* is a living document. Over the years, needs and priorities will change and it will need regular up-dating which will be contained in revised NOPs.

#### **4. RESPONSIBILITIES**

Working under the umbrella of MALFF, since its establishment in the mid-1960s DOF has been the main driver of fisheries development; in the process expanding from a single person to encompass Resource Management, Aquaculture, Extension and Administrative units. The professional team is guided by the previously mentioned Strategic Plan and FMP. The St Lucia Fish Marketing Corporation (SLFMC) will be another key player in the implementation of the Strategy. Established in 1985 with assistance of the Canadian International Development Agency, and part of the National Development Corporation, its remit is to support market development and even out supply and demand for national production. The St Lucia Fisherfolk Organization (SLFFO) has also an important role. Launched in 2007 with support from the Caribbean Regional Fisheries Mechanism (CRFM), it replaced the National Association of Fishermen's Cooperative Society Limited, and is the national umbrella organisation for the eight fishery cooperatives. Fishery coops themselves are under the auspices of the Department of Cooperatives of the Ministry of Labour Relations Public Service and Co-operative. These will be vital as we move towards greater stakeholder responsibility and co-management of the resources.

A number of other bodies have an important part to play in the process. The involvement of the Sustainable Development and Environment Division of the Ministry of Sustainable Development, Energy, Science and Technology will emphasise the link between a healthy fishery sector and a healthy environment and ecosystem. This is especially critical given the on-going concern about the potential negative impacts of global climate change on our country. The Marine Police Unit of the Royal St Lucia Police will ensure compliance with Fishery Regulations introduced to support the legitimate activities of responsible fishermen, and together with the MALFF praedial larceny unit will look to reduce the costs imposed on the fishing sector by widespread theft of catch and equipment. We will liaise with the St Lucia Air & Sea Ports Authority in working to ensure that fishers have the quality of required on-shore support. Gender issues are an important consideration and support will be provided by St Lucian Division of Gender Relations of the Ministry of Health. Non-governmental organisations such as the Soufrière Marine Management Association (SMMA) will be vital in generating stakeholder involvement. Other agencies will be identified as required by the proposed NOP and the various activities and tasks to be undertaken.

Over the past 40 years, the fisheries sector has enjoyed considerable financial and technical support from our International partners. The Governments of Japan, Taiwan, Canada and the European Union, amongst others, have helped to develop our capacity to effectively harvest, land and market St Lucia's national fishery resources and provide the base for an incipient aquaculture sector that has the potential to contribute to the income diversification strategies of agriculturists. Continued

financial and technical support will be vital in implementing the *Plan* and key in determining our rate of progress.

Fish do not recognise political boundaries. Many of the most important resources are shared with our Caribbean neighbours and the fishing fleets of various nations that harvest the highly migratory species of the Atlantic Ocean. To ensure sustainable management, we must work with the Caribbean Community (CARICOM) and the Organisation of East Caribbean States (OECS) to ensure effective local management; also the Western Central Atlantic Fisheries Commission (WECAFC) and the International Commission for the Conservation of Atlantic Tuna (ICCAT).

With DOF taking the lead, the key St Lucian players have the mandate, professional capacity and joint resources to drive the *Plan*, and coordinate actions with our International Partners. However, the key to the effective implementation of the *Strategy* will be the role and responsibilities assumed by all St Lucians. Globally, it is recognized that a cornerstone to the successful implementation of a sustainability strategy is the full involvement of stakeholders with a formal process that seeks and accepts their views and information, and makes effective use of their knowledge to manage fisheries. There is a need to establish effective mechanisms to maintain continuous, formal, stakeholder participation. This concerns not only fishers but all St Lucians including consumers, local community groups, individual community members, school teachers, students and civil society in general who must do their bit to protect our resources.

## **5. STRATEGIC CONTEXT**

### **5.1 Legal Framework**

The Fisheries Act Chapter 7:15 gives the Minister of responsible for fisheries responsibility for management and development of Saint Lucia's fisheries sector and the authority to create new regulations for the management of fishery resources. The Saint Lucia Fisheries Regulations Chapter 7:15 provides the specific guidelines for interpreting the Fisheries Act. The existing FMP encompasses both conservation and development issues and identifies a number of options, in terms of actions for the management of various fisheries. More specifically, it provides information on fisheries policy, goals, guiding principles, the legal and institutional framework, fisheries issues and specific management plans for the major fisheries of Saint Lucia.

### **5.2 Policy Framework**

While St Lucia does not have a single overarching National Development Strategy, various documents highlight the chief issues. These include consideration of the relative merits of a Strategy compared to a Process that allows for a coordinated set of participatory and continuously evolving processes of analysis, debate, decision-making, capacity development, planning, investment, monitoring, and evaluation.<sup>4</sup> There is a National Environmental Policy<sup>5</sup> that provides the broad framework for environmental management in Saint Lucia, and establishes links with policies and programmes in all relevant sectors of economic and social development. There is also a St. Lucia's Climate Change Adaptation Policy & Strategy.<sup>6</sup>

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<sup>4</sup> UN DESA 2009. Review of Progress Made by Saint Lucia in Addressing Vulnerabilities of SIDS through Implementation of the Mauritius Strategy for the Further Implementation (MSI) of the Barbados Programme of Action (BPOA).

<sup>5</sup> Government of Saint Lucia 2004. Ministry of Physical Development, Environment and Housing National Environment Policy (NEP) and National Environmental Management Strategy (NEMS) for Saint Lucia. Final Draft. November 2004

<sup>6</sup> Government of St Lucia 2003: Saint Lucia National Climate Change Policy and Adaption Plan.

The National Agricultural Policy<sup>7</sup> that covers fisheries notes *“the need for a radical rethinking and approach to agriculture and rural development... (that) must espouse a developmental approach that provides scope for “self-propelled”, people centred development. This participatory mode presents more effective models for decision making, institutional building, policy design and implementation”*. Among the Policy’s objectives are: increased efficiency and competitiveness; active stakeholder participation; improved technology; national food security; rational usage of resources; the protection, conservation and sustainable use of natural resources; the expansion of production and the market base; and the generation of employment and income in rural areas.

St Lucia is committed to the policies of International and Regional organisations of which it is a member. The OECS provides policy and technical guidance and support for sustainable management of the fishery resources of Member States. At the wider regional level, the Caribbean Regional Fisheries Mechanism (CRFM) was established to strengthen regional integration in management of marine resources in CARICOM countries. Regional collaboration through the CRFM is considered essential for equitable and sustainable utilisation of the Region’s shared resources. The Caribbean Community Common Fisheries Policy (CCFP) highlights the need for effective cooperation and collaboration in sustainable utilisation of Caribbean fisheries resources and related ecosystems and the establishment of appropriate measures for their conservation, management, sustainable utilisation and development. Related to this Policy are objectives including the importance of sustainable development, the improved welfare and livelihoods of fishers and fishing communities; eliminating illegal, unreported and unregulated (IUU) fishing, building institutional capabilities, and integrating environmental, coastal and marine management considerations into fisheries policy and to mitigate the impacts of climate change and natural disasters. Key factors are the use of fishers’ traditional knowledge in the fishery and habitat management and a precautionary approach with fishing effort not exceeding sustainable potential. Also important is stakeholder participation in the decision making process, good governance, accountability and transparency.

WECAFC identifies a number of issues that impact the potential for sustainable fishery management in the Caribbean<sup>8</sup> including: limited human, technical and financial resources; incomplete and outdated policy and legislative frameworks for fisheries and aquaculture; institutional weaknesses of fisheries authorities and other relevant stakeholders; low overall political priority given to fisheries management; limitations on research and information on responsible fisheries and its management; inadequate arrangements for actions related to compliance with regulations; and lack of awareness of the need for responsible fishing.

## **6. STRATEGIC AREAS**

During the planning process, consultation allowed stakeholders to identify a large number of issues and problems that were considered to impact on the development prospects of the fisheries sector. By identifying the root causes of these, the DOF technical team identified seven strategic areas for inclusion in the *Plan*: institutional strengthening; strengthening stakeholder input into the decision making process; improving the average incomes of fish catchers; effective fisheries management;

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<sup>7</sup> MAFF 2006 National Policy & strategic Plan Summary Booklet 2006

<sup>8</sup> WECAFC 2012c Review of the State of Fisheries in the WECAFC region. Western Central Atlantic Fishery Commission (WECAFC) Fourteenth Session. Panama City, Panama, 6-9 February 2012 WECAFC/XIV/2012/2

the development of fish farming; modern on-shore ancillary support; and efficient product marketing.

## **7. CROSS CUTTING ISSUES**

### **7.1 Tourism**

Tourism presents both an opportunity and potential issues for the fishery sector. The 300,000 plus international tourists that visit our country each year present a strong market for high value and high quality fisheries and aquaculture production. However, tourists and fishers share the same resources and this gives the potential for conflict of interests. At the end of the day though, both groups share the common goal of maintaining a healthy ecosystem for leisure and work opportunities. The *Plan* should recognise the potential for conflict and reduce the risk by defining exclusive areas, with both groups collaborating to ensure a healthy resource. The future expansion of tourist infrastructure must take into account the potential adverse impacts of land based pollution on the marine environment, while both groups need to protect coral reefs and mangroves.

### **7.2 Gender**

In St Lucia over 40% of households are headed by women who have the main responsibility for the economic welfare of their families. In general, unemployment among women is much higher than the corresponding level for men and although the numbers of women in politics and the civil service has increased the overall participation rate remains low. We acknowledge the importance of ensuring that any increased opportunities in the fishery sector are open to women, especially those with a primary school education with few marketable skills which limits their potential to enjoy a reasonable standard of living.

### **7.3 Climate Change**

There is increasing awareness of the risks from climate change; human activity is altering the climate and will continue to do so. In the past century, surface temperatures have increased and climate change is impacting physical and biological systems. While there is uncertainty about the nature of climate change and the extent of rising sea levels, regional climatic change and more extreme meteorological phenomena, the potential for adverse consequences on human activity must be taken into account. This global issue has serious implications for the need to strengthen our national capacity to assess potential risks and to develop and implement strategic approaches to mitigate the possible negative impacts. In the fishery sector a number of risks may be identified for fishing and the type of vessel and landing facilities that are needed. For example, changes in the distribution and availability of fish species, safety-at-sea and safe berthing. In turn, this emphasises the importance of harvesting fish stocks according to the precautionary principle as factors external to fishing mortality may influence catch opportunities.

## **8. NATIONAL FISHERIES PLAN**

### **8.1 National Fisheries Policy**

#### **Vision Statement**

The Vision of the St Lucian Fisheries Sector that guides the goal and the objective reflects the emphasis on sustainability and profitability, and the stress on the combined importance of the production and ancillary sub-sectors and shared responsibilities:



***To support strong partnerships between civil society, private sector and public sector, and advance a sustainably governed fisheries sector that will enhance profitability and contribute to food security.***

### **Long Term Strategic Goal**

This Goal defines where we want the St Lucian Fisheries Sector to achieve in the long term and to which the *Strategy* should contribute in the initial 10-year period:

***To foster medium to long term economic prosperity in the fisheries sector through the promotion of sustainable fisheries and effective fishing techniques that will result in fishers and fish farmers meeting and exceeding national wage standards while maximising the potential long term economic value of the available aquatic resources to the people of St Lucia.***

Emphasis is on the medium to long term as opposed to a short term that could be used to justify over fishing and the licensing of too many vessels in order to respond to the lack of on-shore income earning opportunities. This approach also requires greater cognisance of important factors such as the implications of climate change. The final part of the Goal stresses that the fishing sector is one user of the aquatic resources and to maximise all benefits, appropriate consideration has to be taken of the competing claims of other users, especially the tourism sector. Sustainability / long term / St Lucians draws attention to the need to take into account the interests of both current and future generations in making strategic decisions.

### **Mission Statement**

Effective and efficient implementation of the *Plan* will require input by all stakeholders in order to make best use of all available human and financial resources needed and develop a team approach that will generate synergistic benefits. At the same time, three existing bodies - DOF, SLFMC and SLFFO - must take the lead and drive the process and lead implementation by example.

***DOF will collaborate with all stakeholders including fish marketing entities, fisher and fish farmer organisations, and environmental and other fishery sector related agencies to achieve the long term strategic goal by developing the mechanisms and actions required to define, implement and monitor the policies, strategies, norms, regulations, and other instruments needed to ensure the sustainable use of available water resources.***

### **Objectives**

In line with the identified strategic areas, seven objectives are defined for the implementation of the *Strategy* in the 10-year period 2013 -22.

- **Objective 1: Institutional Strengthening.** To structure and support an effective and efficient Institutional Framework that in cooperation and collaboration with other public sector institutions, stakeholders and international agencies successfully implements and monitors a National Fisheries Plan that responds to the needs of sustainable and profitable fish catching, fish farming and related activities.
- **Objective 2: Strengthening stakeholder input into the decision making process.** To formally and effectively include all fish-related stakeholders in the decision-making process.
- **Objective 3: Improving the average incomes of fish catchers.** To support fishers in improving their incomes by identifying and supporting the implementation of options to reduce operating costs and improve average first hand sales prices.

- **Objective 4: Fisheries Management.** To maintain the resources of marine and freshwater species at a sustainable level in the context of an approach that stresses the importance of protecting ecosystems including habitats and other ecologically sensitive areas and takes into account the potential negative impacts from global climate change.
- **Objective 5: Aquaculture.** To increase the contribution of fish farming to economic growth, food supply, and the income diversification strategy of small scale farmers.
- **Objective 6: On-shore Ancillary Support.** To provide the on-shore support, including infrastructure, needed by an efficient, effective and profitable fish catching sector.
- **Objective 7: Marketing.** To promote an increase in the value of caught and farmed product through better fish handling, an efficient fish market and value added processing.

## **8.2 National Fisheries Strategy**

In the *Strategy*, the identified sectoral objectives are redefined as the results that must be achieved in the period 2013-22. Once approved, neither the objectives nor the results may be changed unless absolutely necessary. In contrast, the identified actions required to achieve the results may be altered to reflect changed circumstances, new knowledge or better understanding. The results and related actions are shown in Appendix 1.

**Result 1: Institutional Strengthening.** Over the period of the *Plan*, DOF and other public sector agencies with direct responsibilities in the fishery sector have received the support (human, financial, logistics, legal framework and training) required for its implementation and have cooperated fully with other public sector institution, stakeholders and international agencies in meeting the objectives.

In the past, the main actors in the development process have undertaken work largely independent of the others and this has failed to make the best use of available resources and generate synergistic benefits from a coordinated and planned approach. This shortcoming highlights the need to create a clear organizational structure with unambiguous responsibilities and provides the rationale for an integrated approach to development of the fisheries sector with the alignment of diverse activities including those currently fragmented among several ministries and authorities. This will reduce overlaps and uncertainty among those charged with *Plan* implementation. This is especially important at a time when public finances are stretched by a global economic crisis that has also reduced the available funds and policies of international donor agencies. In confronting the issues that bear on the sustainability of the fishery sector, different institutions should share responsibilities in working towards a common goal and achieving a common set of objectives. The broadening of the ownership of the *Plan* to a number of Institutions will increase the potential for success while reducing the overall financial cost and the consequent need for funding by central government. For example, a *Strategy* that highlights the need for DOF to introduce regulations will be largely meaningless if an effective compliance plan for the fish catching sector is not implemented by the Marine Police. Efforts to increase the quality of fish by requiring the use of ice at-sea will yield limited practical benefit unless the chill chain is maintained throughout the distribution process and health and sanitary regulations are enforced; which in turn calls for effective enforcement of regulations in the added value chain.

A number of actions are needed to implement this approach. The *Plan* should be validated and accepted by all the actors in the process that are prepared to make a formal commitment to its implementation. This forms a basis to determine the appropriate institutional setting for *Plan* implementation, including the extent to which the affiliations of the main actors may be changed.

For example, is there justification for a Ministry dedicated to the fisheries sector and should SLFMC and the fishery cooperatives fall directly within its remit. Whatever the outcome, the mechanisms to coordinate individual actions should be in place at the start of the implementation process. The coordination mechanism should be formal and designed to bring about real actions rather than leaving projects and plans on paper.

The point is made elsewhere that the NOP must be based on a realistic grasp of the human and financial resources available over the planning period. It is counter-intuitive to make proposals that do not have any prospect for implementation; if such was to happen stakeholders could question the credibility of the programme and quickly lose interest. At the same time, the implementing agencies must have the capacity to undertake the activities that are assigned and this implies not only the availability of money and staff but effectiveness in its use, and the skill and commitment of the personnel. In turn, personnel must be provided with the logistical and other support needed for them to carry-out their work. This may require the reassignment of individuals and most certainly an on-going training programme to up-date skills. Given that the performance of staff is important, an on-going performance evaluation programme will be needed to ensure the right people are being used for the tasks in-hand with a need for upward mobility of officers and to attract well-qualified personnel into the sector.

The implementation of a strong communications strategy that provides for structured liaison between the various actors in the process will be central to successful *Plan* implementation. This relates to internal, inter-institutional and third party communications, with the current *ad hoc* approach replaced by formal mechanisms. The staff of each entity should be aware of the *Plan* and their role in achieving the results; planning and the results of works should be known to everyone involved in the process. There should be an external awareness of the actions, the reason for them and the progress being made. Such transparency will pay dividends and garner support for the actions but it is important that the mechanisms feed through from higher level communications to day-to-day relationships at the management level.

Central to success over the ten years will be our ability to gain the support of the international community, especially where capital spend or specific training is needed. We will ensure that new and on-going projects are designed and monitored with full stakeholder participation so that beneficiaries have the willingness to assume their ownership. At the same time, we will look to build confidence in the consistency and coherency of the *Plan* by ensuring that proposals fit with it and contribute to the realization of the objectives. On that basis, we will fully participate in regional and country-specific initiatives that are implemented by the agencies, while making requests for their assistance for specific actions. The proposed sector approach to *Plan* implementation will bring the additional benefit of reducing the transaction costs associated with external funding, while facilitating the effective monitoring of the results of projects financed by funding agencies.

**Result 2: Strengthening stakeholder input into the decision making process.** A wide range of stakeholders have participated in the planning and implementation of the Plan through an appropriate formal mechanism and they have a clear idea of how their recommendations and advice have been incorporated into the decision making process.

Globally it is well understood that to maximise the potential for success of policies, strategies and projects, stakeholders must be fully involved in the decision making process on a formal and continual basis. This helps to ensure that actions are decided with the beneficiaries, whose commitment at the end-of-the-day will play a large part in determining the sustainability of the

actions. We concur with the National Agriculture Policy's highlighting of a participatory mode and the emphasis of the CARICOM CFP on the use of traditional knowledge and stakeholder participation in the decision making process. At the same time, we would go beyond that concept and emphasise the need for stakeholder accountability; fishers in particular must take responsibility for their own actions and not expect the Government or other agencies to provide a solution for all their problems. A strong example of this is the maintenance of the fishery complexes and the appropriate use of the facilities that have been provided at substantial cost. The public sector role in this sense is to work with stakeholders to provide the training needed to strengthen specific skills and improve the understanding of the importance of fishing responsibly and sustainably and to develop the mechanisms that provide the basis for stakeholders assuming ownership of resource management.

There are two main obstacles to achieving this result. Firstly, we have not established the fishery advisory committee that is provided under the Fisheries Law and associated Regulations. The legal provision facilitates the speedy implementation of the approach albeit there must be a broadening of the current provision to allow for wider membership and the devolvement of detailed discussion to the local level and regional committees. The National Committee will not only provide advice to the responsible Minister, but strengthen transparency as Government professionals in the various fields present their activities and results. Secondly, it is clear that despite all the efforts made, including the allowance for subsidies and the potential to generate income through fuel sales, existing coops are considered weak and there is a general lack of satisfaction with them and their poor management. The potential benefits of cooperatives are well known with their ability to represent the collective interests of their members including bulk buying to reduce the costs of inputs, while also improving market conditions for fresh fish landings. However, the current set-up has made slow progress with fisher coops and SLFFO (that was formed 5 years ago); despite some promise they continue to fall short in terms of business acumen, ethos and membership. Both SLFFO and the individual coops have critical roles in achieving *Plan* objectives, including making a meaningful contribution to the management of the fishery complexes and working with their members to develop the ability to manage their small scale enterprises as profitable businesses. The success achieved will be reflected in membership. To support the change it is important that, in the initial years at least, DOF has a direct role and oversight in the day-to-day affairs of the coops, and that those cooperatives work effectively with the national framework of the SLFFO. The idea is to promote transparency and fairness and provide the basis for a growth in membership.

We have already established an approach to this issue in cooperating with the design of JICA's new project that will concentrate on four main areas: improved information; improved organisation of fishers to facilitate fishery co-management; fishery specific management plans; and improved business plans and marketing plans for fishery organisations. In turn this forms part of a training programme to ensure that the co-ops have the capacity to successfully implement the required activities. All fishers should have the opportunity to be part of a coop – including those involved in aquaculture.

In the medium term we propose to maintain the current subsidies; but only to those coops that belong to the SLFFO and with management that has been proven capable to properly represent the interests of the members. Certification by DFO according to an agreed set of parameters will be required. A strengthened alliance of coops under the auspices of the SLFFO will support group

purchases, facilitate credit, improve joint marketing efforts and provide the basis to improve the welfare of fishers through schemes for social security, insurance and pensions.

**Result 3: Improving the average incomes of fish catchers.** The annual net income of fish catchers has increased at least at the same level as the average earnings in other sectors.

Over the past four decades we have made substantial progress turning the St Lucian fishing sector from an artisanal, at times subsistence, activity with low technology that lacked capacity to maximise the potential returns from the harvest of fishing resources found in our waters. We have accomplished this through promoting, amongst other things, the use of fibre glass vessels, outboard engines and fish aggregating devices (FADs) while ensuring the traditional character of the sector has been maintained in the various fishing communities. This has maximised the benefit of the fisheries, with work and wages for thousands rather than the hundreds that would be involved if the sector had been industrialised. Yet, even with small scale fishing activity there is a limit to the fishing effort and the number of fishers that the resources can support with living wages. On that basis, our emphasis must shift from developing the fish catching sector to consolidating what we have and calling it a-day on increasing the number of participants. This is logical, as when landings are stagnant, the more fishers there are the lower the average catch and related earnings. As fishing costs have increased and profits have reduced, it is difficult for the fishers to harvest responsibly and comply with the regulations as they need to live and feed their families. We have provided a rebate on fuel since the 1970s and this has supported the cooperative's distress fund. However, such an approach does not respond to the need to create an efficient, sustainable fish catching sector – indeed subsidies may contribute to over fishing and economic wastefulness by supporting inefficient fishing operations. In the long term, we aspire to strengthen our credentials for sustainable fishing by identifying appropriate mechanisms to allocate property rights in the fishery (i.e. individuals "own" rights to fish) while protecting the social role of the sector as a source of employment in otherwise marginal communities. Such an allocation could also be used as a mechanism to provide retirement funds as fishing rights could be bought and sold. However, as the situation now stands we are a long way from that and the emphasis must be on consolidation of existing fishing units, improving profitability and developing the business skills of our fishers. This will require a training plan to support the various initiatives, with modules developed for implementation by DOF and SLFFO based on gap analysis.

While we will maintain the fuel and other subsidies, we will look to reduce fuel costs and increase the expected life of investments by promoting improved technology such as four-stroke engines that while costing more reduce fuel use. It has been proven that FADs work and they represent a relatively cheap investment. Again, we are working with JICA to increase the number available and this is tied in to strengthening the capacity for co-management. Also we are looking at the possibilities to place FADs further out with some for the exclusive use of sports fishermen to reduce the potential for conflict. In terms of other fishing costs, as noted above an effective cooperative organisation should be able to reduce these by bulk buying, while efficient management of the landing complexes should increase fishing time.

We will always be interested in initiatives designed to improve efficiency and we will support pilot projects designed to prove the viability of actions. An example is testing of the mother ship approach where a larger vessel with on-board chilled storage tows several smaller vessels to the grounds and acts as a landing platform for fishing trips of 2 to 4 days. While we understand that tradition and culture may prevent fishers from accepting the idea of longer trips, if proven viable this would have

the benefits of improving fish quality, increasing catch and reducing fuel costs and result in increased fisher earnings.

Another focus to lowering fishing costs is to reduce the amount of praedial larceny and we plan to extend the role of the Ministry's praedial larceny unit to combat all types of larceny in the fisheries sector including sea moss culture.

Analysis indicates that our fishers are aging; a large proportion of them are approaching retirement age while there is a lack of young entrants into the sector. There are a number of reasons for the lack of interest in becoming fishermen – the nature of the work, the lack of guaranteed earnings, the attraction of shore-based occupations in the tourist sector and the inability to access credits to establish a small scale business. While it may appear to be a contradiction to have a policy of restricting an increase in the fishing effort, while looking to promote new entrants, the reality is that the sector must continue to have new blood. The future creation of property rights would provide an incentive for older fishers to retire; we need to examine ways in which young persons can replace them. It is likely that access to credit will be easier for those with appropriate training, and we will provide this through the various modules. Further, the capacity to repay loans will be contingent on the profitability of the business – hence the need to increase earnings and reduce outgoings.

**Result 4: Fisheries Management.** An evergreen integrated FMP based on the precautionary approach and taking into account the potential impact of climate change has been defined and implemented.

The health of the fishing catching sector and the viability of making new investments is totally dependent on effective resource conservation. If there is no fish there is no industry. Although we lack the capacity to mount full scale research programmes to assess the status of the main stocks, the indications are that highly migratory species such as tunas and billfishes are close to maximum sustainable yields, while our reef fish and key resources such as lobster and sea cucumber are at their maximum. Hence there is a need for a clear and realistic programme to manage our fisheries, with efforts to match catching capacity with the long term sustainable harvest prospects.

The development and implementation of a meaningful FMP will depend to a large extent on a knowledge and understanding of the current complexion of the sector and how the available opportunities must be allocated on a seasonal and fishery basis. The on-going fishery census will provide the detail that has been lacking over recent years and give us reliable data. While we have licensing procedures, large parts of the sector remain informal and one of the first steps will be to remedy this by introducing a system where all actors involved in fisheries are registered. This will bring a number of benefits, including the ability to trace product origin and thus support actions against praedial larceny. By 2015, no vessel, fisherman or trader will be able to operate without the required license.

The FMP covers a number of areas. It is important that it takes into account the claims by and needs of all users especially at-sea so reducing the potential for conflict between fishers and tourists. Extending coastal zone management beyond the current areas such as the SMMA and CAMMA will provide the basis for the definition of user rights, including the authority to fish off FADs. The development of an FMP will involve the confirmation and rationalization of existing technical and administrative management measures with additional rules as required. These should be contained in an FMP that is considered “evergreen” i.e. it is for an indefinite period with annual up-dates providing new information on stock status and confirming management measures.

The capacity to effectively regulate St Lucian fisheries will be enhanced if there is general awareness of the need for action. For example, consumers should understand why they should not buy fish or crustaceans below a certain size or at a particular time of the year. This goes back to responsibilities. St Lucians in general need to protect the use of their own natural resources and ensure that the fishers charged with stewardship are acting in a responsible manner. A public awareness campaign will support consumer education.

Effective management requires enforcement of the regulations and this is one area where over the years we have not achieved a great deal of success. This must change. We anticipate that co-management initiatives with the authorities working with fishers will increase peer pressure to respect regulations and that fishers, aware of the damage illegal activity implies for their own prospects, will report transgressors. At the same time, Government's enforcement capacity must be improved and DOF will work with the Marine Police and other enforcement agencies to prepare a clearly articulated plan with realistic costs for a risk based approach to enforcement. Local knowledge will be used to identify the main possibilities for infringements and to develop a related surveillance programme. The plan will cover regional issues, including collaboration with neighbouring countries to put a stop to IUU fishing. The harmonization of measures on a regional basis, for example on closed seasons, would reduce the potential for trade being used to circumvent regulations.

Research will be important to inform management decisions. While we do not have the capacity to develop reliable models for stock assessment with the definition of biological reference points to direct harvest strategy, DOF biologists perform valuable work in advising fishers of the biological characteristics of the stocks and advise on the need and appropriateness of management measures (e.g. minimum sizes, closed seasons and closed areas). This is invaluable for the preparation of plans to manage local stocks. For highly migratory stocks we will look to improve the range and quality of our data to feed into the models developed at an international and regional level. The required annual research plan will be discussed with and approved by stakeholders in the Committee as the emphasis will be on a joint approach with fishers providing a great deal of the information on a voluntary basis.

A large part of the national catch is of highly migratory species that are managed by regional bodies. The future will not reduce the authority of these bodies; rather they will perform an increasingly important role in defining total allowable catches and allocating quotas. To protect the interests of our fishermen it is imperative that St Lucia becomes a party in all relevant international bodies, with national participants informing stakeholders of the content and findings of the various meetings.

Given the high vulnerability of the fisheries sector to global climate change, and the high exposure St Lucia to natural disasters and hurricanes, this will be an important subject for consideration in the IFMP. It will identify fishery specific risks and define mitigation measures e.g. the protection of mangroves and corals.

**Result 5: Aquaculture.** The number of active aquaculture farms and the average annual production per farm has increased.

Over an extended number of years we have looked to promote the development of aquaculture in St Lucia with the twin aim of contributing to food security and providing an alternative to the income earning strategy of agriculturalists formerly dependent on bananas. Concentration has been on the culture of sea moss in coastal waters and tilapia and macrobrachium in freshwaters. This type of farming is technically possible, as is the culture of other species as proven in other countries, and

even though our country has a limited area available for aquaculture and there are other constraints to be overcome, we have the potential and commitment to identify and develop targeted opportunities that have potential in the domestic and international market. We have benefitted strongly from the assistance of Taiwan in providing the new aquaculture facility at Union that adds to the potential to grow the current production of freshwater shrimp and tilapia by providing four times the current levels of demand for fingerlings and PL by farmers. On that basis we will continue the drive for to maximise the potential of existing farmers and encourage new investment in the sector, with the aims of: (i) increasing the production per unit and bring down the sales price and develop the market; and (ii) reaching a critical mass of activity which may be sufficient to generate domestic investment in ancillary activities. As an incentive, fingerlings and PI are being provided at a subsidised price in the anticipation that this will lead to new investment and increased levels of output. While we do not have the resources to pioneer technical advances in the farming of other species, we will maintain a watching brief on developments in other countries and assess the potential for related initiatives in St Lucia. For example, the potential for such as bivalves (oysters) and brackish or marine water fish species using sea-based cage culture has not been assessed and trials have not been conducted. Given the continued interest in enhancing food security and rural livelihoods, there is need to assess the viability of this type of mariculture development.

New investment will not only be promoted by technical capacity and the potential for profitable sales but also the security of any new investments. Through better planning and coastal management and zoning for specific activities we plan to offer long term licenses to ensure stability. We support the creation of a land bank that ensures that areas not being utilised are available for fish farming.

It is expected that the potential to farm fish profitably with reduced risk will make investors suitable subjects for credit to support new investments. We will work with the sector and the banks to establish an appropriate loan scheme.

We will continue to source alliances with donor countries or organisations to fund and otherwise support the various initiatives.

**Result 6: On-shore Ancillary Support.** The available infrastructure and supporting services have been managed & maintained effectively & are providing the services required by stakeholders at a competitive price.

While fish catching will continue to provide the main source of work, especially in rural and coastal communities that are outside the main tourist area, we need to maximise the employment and income by generating fishery-related opportunities on-shore in marketing and the ancillary service sector. A coherent plan for sustainable fisheries development must identify the potential to widen the economic base of fishery communities and reduce the pressure to continually increase the number of fishers and fishing boats and the risk of over fishing while at the same time reducing the average earnings per fisher.

Well planned and managed facilities improve fishers' profitability by increasing their fishing time and protecting their investments when the boats are berthed. Over the past two decades, DOF has established a three-tier hierarchy of fish landing sites, with JICA assistance in the construction of the fishing complexes. While these facilities were not designed with global climate change in mind, their construction provides the basis of an adequate response to what may lay ahead if they are maintained in the required condition and not allowed to deteriorate as has been the case with previous investments in infrastructure.



The challenge in existing facilities is twofold: the effective management of the complexes to maximise their value to users; and their adequate maintenance to ensure their availability in the decades to come. Different from capital expenditure, the response to these challenges will to a large extent depend on the ability and willingness of users to pay appropriate fees for services such as berthing, water, fuel, storage etc. and effectively participate in management. Our aim is to have a profitable fish catching sector which generates acceptable levels of income for fishers and gives a return on investment with margins that allow them to pay operating costs while reducing dependence on subsidies that are ultimately paid for by St Lucian tax payers. At the same time, users should only be expected to pay for the efficient provision of services – vessels owners must have confidence in the security offered; there must be a reduced risk of damage during inclement weather; the processes for going to and returning from fishing must be efficient; the services for the supply of fuel, water and ice must be effective and cost competitive.

Currently, the responsibility for the management of landing sites is inadequate to achieve these two important goals (effective management and maintenance), with conflicting interests and no clear-cut mandate among relevant agencies and stakeholders. The ideal solution is user management, with fishers assuming responsibility through their representative organisations. JICA's new project has this as one of its central themes. DOF will take the lead in establishing effective management. Once it has been proven that existing facilities may be used sustainably we will the look at how new additional services may be provided, both at existing complexes and in other places.

**Result 7: Marketing. The market for aquatic products has been strengthened through stakeholder representation on the FMC Board; improved quality standards and the quantity of value added produced in St Lucia.**

An advantage is the existence of the SLFMC with a professional staff and a developed infrastructure. While it is not meeting its original remit in full, this is a reflection of the reality of the market and to the need for the business to be run on commercial terms. If it is not possible for SLFMC to operate profitably there are limited prospects for its long term survival. We recognize that a coherent marketing strategy understands the conflict between a requirement to purchase all fish on offer, and the need to make a profit. This is not to say that SLFMC cannot respond to the needs of fishers; but its role must be to lead rather than be a buyer of last resort. At the end of the day it needs to respond to market needs rather than those of the producer whose interests should be represented by functioning coops that plan production, help even out any mismatch between demand and supply and guarantee the quality that SLFMC needs in order to maximise the first hands sales price. This will make SLFMC better able to serve the stringent demands of restaurants and support the increase in retail sales through the ever growing supermarket sector.

To ensure that SLFMC focusses on the issues at hand, there is a strong argument not only for its Board to become operative, but for its membership to be widened to include representatives of the fishers.

Attitudes and practices need to change throughout the sector to maximize the value of our natural resources and safeguard the health of consumers. We will continue to assess ways to promote the use of at ice at-sea, and we propose that success would lead to a grading system for landed fish with the price offered reflecting quality. There is little point improving the quality of fish at landing unless the chill chain is maintained until purchase by the final consumer. In the past, we have supported initiatives to improve retail marketing with the provision of specialized outlets in the market in Castries; yet the major part of the sales continue to be made in less-than-hygienic conditions with

fresh fish sold without the use of ice in high ambient temperatures. Regulations have to be strengthened, implemented and enforced

With the greater use of FADs the complexion of our catch has changed and non-traditional species have been landed. Initially, consumer resistance due to lack of knowledge on how to prepare such as swordfish and marlin limited the market potential but as time has gone on these species have become more accepted. Our aim is to create a demand for all the species that are available to our fishers and thus maximize the earning potential in the sector.

Two other initiatives will also aim at this objective. Firstly, we will look to create added value not only to increase sales price and support stability in the market but also to generate on-shore activity. We fully understand that the highest value product is the best quality fresh fish; but at times the market is not able to absorb the landed amounts, especially outside the main tourist season. We do not think there will be major development in this respect, unless there is private sector interest in importing primary produced fish for secondary processing into the likes of fish fingers and fish sticks for sale in the Regional market, but the production of such as fish burgers for local fast food outlets and smoked marlin for restaurants may provide some opportunities. SLFMC is well placed to provide supermarkets with quality vacuum packed products that will supplement their product range. Secondly, we will look to maximize the value of the landings by selling fish to certain niche markets at the highest price and that will mean targeting export markets. It is acknowledged that St Lucia will continue to have a large deficit in fish trade; the market as a whole will continue to consume more fish than we produce and we will be unable to substitute for the main products – especially canned and salted fish. However, if we have the quality we will be able to export the high value landings such as tunas, billfishes and freshwater prawn to international markets and regional markets, especially those such as Barbados that have a high propensity to import to satisfy tourist demand.

Our capacity to export will depend on the standards that our sector meets. While it is too early to consider the need to have a competent authority that would provide the basis for export to the European Union, all future planning must be based on HACCP standards. SLFMP will provide a working model of this. To support planning for the potential of market diversification we will seek to gain international assistance to complete a comprehensive analysis of current market opportunities for the key species and products.

### **8.3 National Operational Plan**

The *Strategy* redefined policy objectives to develop seven required results from the Plan by 2022, and the related actions that currently may be identified. Subsequent to confirmation of the *Policy* and the *Strategy*, a number of action areas will be identified in the *NOP*. It is emphasised that these action areas reflect that different objectives are not mutually exclusive and they will cut across a number of results and actions. Action areas reflect the priorities and the need for sequential actions with the successful completion of actions being a necessary prerequisite for the start on others. The *NOP* is more detailed than the *Strategy* and allocates specific responsibilities and budgets, with a work plan that defines tasks.

### **8.4 Monitoring & Evaluation**

To ensure the successful achievement of the *Plan*, M&E will be needed with adjustments made as required in response to the progress achieved and / or changes taking place in the domestic, regional or global environment. A *Plan* management unit comprised of personnel from DOF, SLFMC and SLFFO will lead the efforts and report to their respective management and the Fisheries

Advisory Committee. The Unit will work together with the collaborating agencies, particularly in monitoring and evaluating the individual action points. The analysis will provide the means for all the stakeholders to judge whether results are being achieved and whether the activities are being completed both efficiently and effectively. M&E provides the basis for shared accountability. The on-going exercise will assess the coherence and relevance of actions to the defined goal and objectives; it will measure effectiveness by assessing the extent to which the *Strategy* is achieving the objectives and contributing to the Goal; it will evaluate the efficiency of the outputs compared to the cost of the inputs to ensure best-value-for-money; and it will assess the impact of the actions and interventions and the changes that have taken place as a result, whether they be positive or negative, direct or indirect, intended or unintended.

## **Annex 1: National Fisheries Strategy 2013-22 – Results and Related Actions**

<p><b>Result 1: Institutional Strengthening.</b> Over the period of the <i>Plan</i>, DOF and other public sector agencies with direct responsibilities in the fishery sector have received the support (human, financial, logistics, legal framework and training) required for its implementation and have cooperated fully with other public sector institutions, stakeholders and international agencies in meeting the objectives.</p>	<p><b>Result 2: Strengthening stakeholder input into the decision making process.</b> A wide range of stakeholders have participated in the planning and implementation of the Plan through an appropriate formal mechanism and they have a clear idea of how their recommendations and advice have been incorporated into the decision making process.</p>	<p><b>Result 3: Improving the average incomes of fish catchers.</b> The annual net incomes of fish catchers has increased at least at the same level as the average earnings in other sectors.</p>	<p><b>Result 4: Fisheries Management.</b> An evergreen integrated FMP based on the precautionary approach and taking into account the potential impact of climate change has been defined and implemented</p>
<p>RA 1.1: The <i>Plan</i> (2013 – 22) has been approved and formalised by the Government of St Lucia.</p> <p>RA 1.2: The Institutional arrangements for the administration and management of the fisheries sector has been reviewed and revised as considered appropriate.</p> <p>RA 1.3: The legal framework has been reviewed and changed as appropriate to provide the basis for the changes envisaged in the implementation of the Plan.</p> <p>RA 1.4: The responsible Ministry / Department has been structured and has been provided with the resources (finance and human) to support the effective implementation, monitoring and evaluation of the <i>Plan</i>.</p>	<p>RA 2.1: A National Fishery Advisory Committee and Regional Fishery Advisory Committees, with significant stakeholder representation, have been established and are functioning as contemplated in their respective terms of reference.</p> <p>RA 2.2: The SLFFO is functioning as contemplated in its Articles of Association.</p> <p>RA 2.3: All Fishery Cooperatives in St Lucia are active members of the SLFFO.</p> <p>RA 2.4: DOF has established a direct role in the management of SLFFO &amp; fishery cooperatives.</p> <p>RA 2.5: Work between SLFFO and DOF has provided training including manuals for the effective management of fishery</p>	<p>RA3.1: A training plan designed to assist fishers to reduce costs and increase incomes has been devised and implemented by DOF.</p> <p>RA3.2: There has been an increase in the number of FADs available exclusively to St Lucian commercial fishermen.</p> <p>RA3.3: The fuel subsidy to St Lucian fishermen has been maintained by the Government of St Lucia and any changes identified in an evaluation of its process have been implemented.</p> <p>RA3.4: Tax incentives for new investments in fishing vessels, engines and gear that are intended to reduce fishing costs have been maintained.</p> <p>RA3.5: Fishermen are benefitting from</p>	<p>RA 4.1: The fishery sector has been formalised with full registration and licensing of fishers, fish farmers, buyers, traders, and retailers.</p> <p>RA 4.2: Zoning of coastal zone usage has confirmed the areas available for fishing and mariculture.</p> <p>RA 4.3: An “evergreen” Integrated FMP has been prepared and implemented.</p> <p>RA 4.4: Technical and administrative management measures have been introduced to support implementation of the IFMP.</p> <p>RA 4.5: A public awareness campaign has been implemented to support the sustainable use of natural resources.</p> <p>RA 4.6: Sport fishermen have established their own FADs.</p>

<p>RA 1.5: The staff training plan that has been up-dated annually has been implemented to provide staff with the skills required to successfully implement the <i>Strategy</i>.</p> <p>RA 1.6: Equipment has been provided that ensures effective use of available staff time and provides required outputs more efficiently.</p> <p>RA 1.7: Staff in DOF and other public sector agencies with direct responsibilities in the fishery sector has been evaluated on an annual basis to assess their success in contributing to the implementation of the <i>Plan</i>.</p> <p>RA 1.8: An effective communications strategy has been implemented to ensure both the internal efficiency of responsible Ministry / Department and to strengthen its external relationships with other Public Sector bodies and stakeholders.</p> <p>RA 1.9: DOF has worked effectively with international agencies providing technical and financial assistance.</p> <p>1.10: St Lucia is a participating member of all relevant international organisations in the fisheries sector.</p>	<p>cooperatives.</p> <p>RA 2.6: A cooperative has been established for fish farmers.</p>	<p>the reduced price of inputs resulting from cooperative purchasing.</p> <p>RA3.6: Fishing time has been maximised through efficient management of the designated landing places and the ready availability of spares.</p> <p>RA3.7: There has been an investigation of the potential to reduce fuel costs through pilot projects.</p> <p>RA3.8: Measures have been introduced to reduce the risk of larceny of equipment and product.</p> <p>RA3.9: There has been an assessment of the potential to provide a credit line for investment by new entrants into fish catching.</p>	<p>RA 4.7: Compliance and enforcement capacity have been strengthened.</p> <p>RA 4.8: Environmental regulations have been applied to reduce the risk of developments creating a source of pollution affecting the fishery sector.</p> <p>RA 4.9: An annual research plan has been prepared to identify the activities to be undertaken to measure the needs for and effectiveness of the IFMP and the results of research have been disseminated to all stakeholders.</p> <p>RA 4.10: DOF staff represents the interests of St Lucia and fishery stakeholders in regional and international organisations and meetings.</p> <p>RA4.11: The IFMP identifies the approach to the risks posed by global climate change.</p>
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<p><b>Result 5: Aquaculture.</b> The number of active aquaculture farms and the average annual production per farm has increased.</p>	<p><b>Result 6: On-shore Ancillary Support.</b> The available infrastructure and supporting services have been managed &amp; maintained effectively &amp; are providing the services required by stakeholders at a competitive price.</p>	<p><b>Result 7: Marketing.</b> The market for aquatic products has been strengthened through stakeholder representation on the FMC Board; improved quality standards and the quantity of value added produced in St Lucia.</p>
<p>RA 5.1: There has been an increase in the active number of production units for tilapia, macrobrachium and sea moss.</p> <p>RA 5.2: There has been an increase in the annual production of tilapia, macrobrachium &amp; sea moss.</p> <p>RA 5.3: There has been an assessment of the potential for economically viable farming of other species in St Lucia.</p> <p>RA 5.4: The economic and technical feasibility of farming other species in St Lucia has been promoted with potential investors.</p> <p>RA 5.5 There is a guaranteed supply of essential inputs (fingerlings / PL / feed).</p> <p>RA 5.6: The hatchery to provide tilapia fingerlings and macrobrachium PL has being operated effectively.</p> <p>RA 5.7: The risk to investments has been reduced by the issuance of long term licenses including access to land / sea area.</p> <p>RA5.8: Fish farmers continue to benefit from the subsidised supply of PL and fingerlings.</p> <p>RA5.9: There has been an assessment of the potential to provide a credit line for investment by new entrants into fish catching and fish farming.</p>	<p>RA 6.1: There has been an assessment of the on-shore facilities required to support the efficient operation of the St. Lucian catching fleet.</p> <p>RA 6.2: The management of designated landing places is effective.</p> <p>RA 6.3: A maintenance plan for the landing centres has been successfully implemented.</p> <p>RA 6.4: Required new facilities and services have been provided</p>	<p>RA 7.1: The Board of FMC has been restructured and reflects greater stakeholder participation in the decision making process.</p> <p>RA 7.2: A grading system has been introduced following a review of current procedures.</p> <p>RA 7.3: DOF has assessed the options to improve the use of ice at-sea and has implemented the recommendations</p> <p>RA 7.4: Regulations on the processing and sale of fresh perishable products have been implemented to cover the preparation, transportation and retail of seafood.</p> <p>RA7.5: Modern, hygienic, fish retail outlets have been established at strategic points in the country.</p> <p>RA 7.6: Underutilised species have been promoted in the domestic market.</p> <p>RA7.7: There is testing of the potential for value added products.</p> <p>RA7.8: HACCP standards have been adopted throughout the sector.</p> <p>RA7.9: There has been a comprehensive analysis of market opportunities.</p>