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# **PROMOTING THE DEVELOPMENT OF GOOD PRACTICES FOR QUALITY ASSURANCE AND MARKETING OF FISH AND FISH PRODUCTS**



**15 – 17 February 2012  
Kingstown, St. Vincent and the Grenadines**

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**CRFM Secretariat  
Belize 2012**



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**Promoting the Development of Good Practices for Quality Assurance  
and Marketing of Fish and Fish Products, 15 – 17 February 2012, St.  
Vincent and the Grenadines**

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## **1. Background**

Quality assurance and marketing are key concerns in satisfying consumer's needs and increasing the value of fish and fishery products. Japan has cooperated with Eastern Caribbean States in the construction of the fisheries facilities and the development of the capacity of responsible organizations for their management. Good practices in the management of these facilities in specific country case studies have shown the potential for fisheries development, quality assurance and marketing. The participating countries were Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St Vincent and the Grenadines where JICA fisheries experts are presently assigned. As such, JICA in collaboration with the CRFM sought to share these results and develop an action plan and a way forward for the region through this workshop.

### **1.1 Meeting Objective**

- (i) To exchange information on good practices in quality assurance and marketing of fish and fish products and outline action plans for the effective management of fisheries facilities involved in processing, product development and marketing.

### **1.2 Scope and Strategies**

1. The workshop addressed ongoing quality assurance and marketing practices and capacities of the organizations responsible for implementing these practices.
2. The workshop built on the achievements of preceding activities in the region to promote quality assurance and marketing of fish and fish products.
3. Taking into consideration differences in culture, customs and traditions, business models from other regions were examined to see if and how they could be applied.
4. Limited financial and human resources are common problems among countries in the region, and it is a fair assumption that these problems would persist. Therefore, the workshop focused on approaches that could be implemented in situations of limited budget and man-power.

## **2. Opening Remarks**

Chief Fisheries Officer of St. Vincent and the Grenadines, Mr. Raymond Ryan, opened the workshop by welcoming guests and visitors to St. Vincent and the Grenadines. He acknowledged the strong relationship among Fisheries Departments and Divisions throughout the Organization of Eastern Caribbean States (OECS) and how these relationships have been crucial in the information exchange among fisheries agencies. He highlighted the relationship between the OECS territories and the Government of Japan and offered thanks for the invaluable technical and financial assistance that Japan has provided to the region over the last three decades. Special mention was made to Japanese technical experts that have provided assistance and made sterling contributions within the Caribbean fisheries sector, in particular Mr. Senga and Mr. Fujii. Recognition was given to the CRFM Secretariat for the role of coordinating, implementing and promoting activities to improve the management and development of fisheries within the region. Mr. Milton Haughton, Dr. Susan Singh-Renton and Mr. Terrence Philip were

given special recognition for their contributions to the fisheries sector since the early 1990's. It was noted that the region has made significant strides in development over the last three decades and has made significant improvements in areas such as the livelihoods of fishers, fishing technology, improved infrastructure and management and conservation of fisheries resources. Mr. Ryan indicated there is still much work to be done as external challenges arise such as the global economic crisis, climate change and stringent trade requirements. He indicated the importance of forums such as the current workshop to facilitate the exchange of knowledge and experiences to chart a way forward to alleviate problems faced in the fisheries sector throughout the region.

Dr. Susan Singh-Renton, newly appointed Deputy Executive Director of CRFM Secretariat, also addressed the workshop and welcomed JICA and the business partners of Japan. She thanked the government of St. Vincent and the Grenadines and the Fisheries Division for their continued support to CRFM and its many partners during workshops. She acknowledged the bilateral relationships between Japan and the OECS and noted the efforts to work at the regional level through CARICOM since 2003. The Meeting was reminded about the JICA / CRFM Formulation of Master Plan for Sustainable Coastal Fisheries Development, which began in 2008 and concluded this year. This plan focused on small-scale operators and was based on close collaboration with private stakeholders and the fisheries managers while considering the various challenges in economic development. The Meeting was informed that it was expected that the lessons learned during the formulation of the Master Plan are implemented and it was pointed out that a follow up phase was planned as it is important to keep up the momentum. Dr. Singh-Renton indicated that CRFM was happy to co-convene the Quality Assurance and Management Workshop and noted that it allowed the lessons learned from the bilateral arrangements between JICA / individual countries to be shared at the regional level. She acknowledged that the CARICOM / JICA / CRFM cooperation was assisting the countries to meet their fisheries management and development goals and noted that the benefits were real. She indicated that CRFM was pleased to partner with JICA in hosting the Master Plan dissemination workshop and as co-conveners of the Quality Assurance and Management workshop. She reminded the participants that it was their responsibility to share lessons learnt on the return home so that the entire fisheries sector could appreciate them. She expressed her wishes for a successful and enjoyable workshop.

Mr. Nariaki Mikuni, Senior Fisheries Expert of JICA then welcomed participants to the workshop and expressed his delight that there were so many people involved who could change the future of the fisheries facilities constructed by Japan. Mr. Mikuni gave a brief history of Japanese cooperatives touching on how Japan has cooperated with the Caribbean Fisheries Division / Departments since the 1990s and that there are many fisheries facilities constructed by Japan. He also noted that JICA experts and many staff who studied in Japan transferred knowledge and technology such as fishing gear, methods and quality assurance to Caribbean Fisheries. It was noted, however, that the fish supply still does not meet the national demand.

Mr. Mikuni indicated he thought the capacity to fully utilize the facilities and those knowledge / technology should be developed and from this, the present workshop was organized to develop the capacity of Fisheries Division / Department and fishermen's organization responsible for the management of the facilities. He indicated that the approaches to capacity development in this

workshop are good practice sharing and action planning. He also acknowledged that there are several good practices in the Caribbean region. It was pointed out that during this workshop, these good practices will be addressed, and the factors that make them successful and the difficulties encountered when applying it will be discussed. Based on those discussions, action planning will commence. Mr. Mikuni indicated that workshop attendees will acquire planning skills and be expected to formulate and implement specific action plans in their various fields, and that JICA is happy to support each of them as a follow up to this workshop.

He informed the Meeting that new, good practices will be generated from the action plans developed, and another workshop will be organized to share them through which new action plans will be formulated and implemented again. Through such positive cycle, the capacity of Fishery Division / Departments and fishermen's organization will be developed. He noted that the road ahead is long and ownership and commitment of the individual countries is the most important factor.

In this regards, Mr. Mikuni expressed his appreciation for the participant's contribution to this workshop in the preparation of the presentations and the information of the fisheries facility in each respective country. He also expressed appreciation to CRFM for working with JICA to formulate this workshop. It was noted that JICA is a bilateral agency and without the help of CRFM's network it would be difficult to organize this kind of regional workshop. He expressed his hope that the workshop would serve as a "kick-off" to collaboration focusing on capacity development to achieve real goals.

The Former Director of International Affairs with the Department of National Federation of Fisheries, International Co-operative Fisheries Organization (ICFO), Mr. Masaaki Sato, indicated that the expectation of this workshop was for a clear depiction of problems in the fisheries within OECS. He expressed his hope to assist countries in addressing their needs and in shaping the future of their respective fisheries sector development. Mr. Mitsuhiro Ishida of JICA also informed the meeting that many 'island workshops' for developing fisheries sectors in the near future in each country were planned. One had already been completed in St. Lucia, two are planned for Dominica, one in Antigua, and one in Grenada. It was noted that this current workshop was a "kick-off" to the subsequent scheduled workshops to continue capacity building in the Fisheries sector.

The newly appointed Executive Director of the CRFM Secretariat, Mr. Milton Haughton, offered his welcome and reminded the meeting of the opportunities presented at the regional and international level for trade and emphasized the importance of this workshop in realizing the benefits associated with trade. Mr. Haughton expressed his pleasure at the consensus to apply the knowledge shared by the various countries.

All workshop attendants then introduced themselves and expressed an overwhelming consensus to learn as much information as possible from this workshop and looked forward to implementing these activities on returning home. Participants were present from; Antigua and Barbuda, Grenada, Dominica, St. Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines; CRFM Secretariat; and JICA. The list is attached as *Appendix 1*.

Mr. Nariaki Mikuni then closed the opening ceremony by thanking attendants for their attention and involvement in the present workshop.

### **3. Case study of good practices in quality assurance and marketing of fish and fish products**

#### **3.1 ‘Grenada Tuna Fishery’**

Mr. Moran Mitchell, Fisheries Officer II (MCS), Grenada Fisheries Division delivered two presentations entitled: “Grenada Tuna Fishery” and “Evolution of Spice Isle Fish House.”

##### **3.1.1 Presentation Summary**

The exportation of yellow fin tuna from Grenada began in 1989 and there are currently three fish exporting establishments on the island, of which Spice Isle Fish House is the major buyer and exporter. The yellowfin tuna export trade facilitated the improvement of the fishing fleet, enhanced job creation, generated foreign exchange, boosted quality assurance, improved the livelihoods of fisher, facilitated the desire of locals for fish as a protein source and fostered food security. Presently there are over 1500 persons that benefit directly or indirectly from this trade. The fishing gear suppliers as well as the agents for outboard and inboard marine engines are direct benefactors of this trade as well as the dry dock marinas, which play a vital role in the docking of long liners and benefit tremendously. The presentation is attached as *Appendix 2a*.

##### **3.1.2 Discussion**

Prior to discussion about the presentation, it was indicated that there would be another workshop through JICA hosted in Grenada and that tours or visits of Spice Isle Fish House (SIFH) could be arranged without difficulty.

Clarification was sought by Mr. Milton Haughton (CRFM) on the statistics presented of the production of tuna in Grenada and if the total value of fish exported from SIFH, NSL and SFA were from a seven-year period (2003 - 2010) of total fish catches or from one specific fishery. It was indicated the values presented were specifically for yellowfin tuna. Mr. Chris James (St. Lucia) queried how SIFH was able to get a specific value from the production of fish from each facility, and if operation costs were taken into consideration when determining fishers’ profit. Mr. Moran Mitchell (Grenada) clarified that the fish processors have production values by vessel from which fish were purchased on an annual basis and that accurate and timely data were necessary for accurate record keeping and that the fishers’ were merely breaking even when taking operation costs into consideration. Mr. Ian Horsford (Antigua and Barbuda) made a comment on the global study of cost and earnings and how it is important to note whether the fishers make a significant profit. Representatives from Grenada and Barbados supported this point.

Dr. Lucille Grant (St. Vincent and the Grenadines) queried how Grenada was able to obtain European Union (EU) certification for export yellowfin tuna, which was followed by a similar

query raised by Mr. Terrence Phillips (CRFM) about the level of enforcement of the regulations by the FDA for the North American market Mr. Moran Mitchell indicated that the American Food and Drug Administration (FDA) visited Grenada and indicated that the establishments needed to be redone according to HACCP requirements. On a revisit by the FDA, the areas in the establishment that were weak were indicated and once these areas were addressed and improved, certification was achieved. In terms of the EU market it was pointed out that Carriacou and Petit Martinique had an established market already in place with the EU and when the new protocols were introduced, this trade was stopped. Grenada then undertook the task of becoming EU certified so as to continue this lucrative market.

Mr. Jerson Badal (St. Lucia) inferred that there is a similar situation in St. Lucia regarding the ownership change of a facility. Discussion continued about Hurricane Ivan and how it was, in some ways, responsible for the destruction of a government run company. It was pointed out that as a government owned industry there is a guaranteed price to fisherman, which is above market price and above international selling price. Mr. Badal inquired how, in Grenada, the fisherman coped with making the transition from government owned facilities to a private company owned facility where the price is not guaranteed. Mr. Mitchell clarified that the government facility had lots of difficulties and the Hurricane was just one small event of many that lead to the change of ownership. It was noted that even though buyers were offering a lesser amount, there was always the option of alternative buyers who were happy to take the fish. Mr. Haughton (CRFM) queried what the current situation was in Grenada, with regards to bait and fuel issues. Mr. Mitchell (Grenada) clarified that fisherman receive a concession for fuel from the government to make it viable for fisherman to go on expeditions, however the smaller vessels lose money if daily fishing trips are unsuccessful. He indicated that bait is another issue, alluding that if there is no bait, there is no industry. He noted that smaller vessels in Grenada receive concessions, but they lose 'interest' on these concessions because they can't hold as many tuna, whereas larger vessels have the ability to. It was pointed out that small vessels are an important supplier of yellowfin to the local market as they do not carry ice and this is a requirement for yellow fin tuna destined for the export market.

## **3.2 'Evolution of Spice Isle Fish House'**

### **3.2.1 Presentation Summary**

Spice Isle Fish House (SIFH) evolved from the parent fish-exporting facility, Alex Swan, which took over The Grenada Commercial Fisheries Ltd. (GCFL) in 1993. The main product of the company is yellowfin tuna, which is exported to North America and there is a real focus on fish quality. The present facility was constructed by JICA and the company has made internal arrangements to be in strict accordance with the HACCAP method and has stringent quality assurance principles that fishers must abide by in order to have their catch purchased. SIFH regulations include: grading the fish upon arrival, cleaning, proper packaging with frozen gel packs and insulated boxes, proper labeling at all critical steps, and shipping. SIFH maintains a strong working relationship with the government as they receive some assistance in the form of concessions from the government and remains a liaison between fishers and government as they will speak to the government on behalf of the fishers and will assist government institutions (e.g. Ice donations). SIFH also has a strong relationship with fisherman as they hold consultative

meetings, advise fishers on their finances, and provide services such as: a landing jetty, ice, water, fuel, an outlet fishing retail shop and boat repairs. One of the main problems encountered is regular maintenance of the jetty as it is available for usage by multiple stakeholders. Other income generation activities of the company include: sales of ice, water, lobster, shrimp, conch, engine parts, fishing gear / accessories, outlet retail shop and engine repair. The presentation is attached as *Appendix 2b*.

### **3.2.2 Discussion**

Mr. Mikuni (JICA) led the discussion and reminded the meeting that management is very important in addition to training and capacity development for all Fisheries Division staff.

It was noted by Mr. Phillips (CRFM) that the fishers may not be doing as well as the company regarding revenues / incomes and suggested that further studies should be done to determine the fishers' earnings. He pointed out that just breaking even would not be contributing to improvement in their respective livelihoods. He also indicated that when the government is involved in the business aspects of fisheries, they tend to pay fixed prices, and cannot compete with the middlemen, so the fishers only go to them when there are gluts, etc., which raised the question as to whether governments should be involved in operating businesses or focusing on policy and regulation. Regarding SIFH, he further asked if their exports were affected by the financial crisis in North America in 2008. Mr. Mitchell (Grenada) pointed out that every year there is a crash on the financial market and when international fleets approach local waters, there is a price drop because of the amount of fish landed. He noted that SIFH would inform the fishers of the drop in price on the international market and would offer a lower price than usual. It then became the fishers' decision to continue fishing during this period or seek alternative buyers. Mr. Phillips enquired as to whether the EU requirements and the North American requirements for quality assurance and safety were complementary to which Mr. Mitchell indicated that the E U system is very stringent; their standards are higher than the North American system which makes it easier to achieve export to North American markets.

Mr. Badal (St. Lucia) queried as to how SIFH changed from government owned and driven to private sector driven. The issue of when the social / political objectives overpower that of money making and quality assurance was also mentioned. Mr. Mitchell (Grenada) indicated that the manager of SIFH was previously managing a private fish house and was experienced in the business and quality assurance aspects of fish exports, before and after the evolution of SIFH. The problem of when it is a government run operation was discussed and an example of fishers being unable to receive their money when the Minister was away and could not sign the checks was given. This added to the demise of the previous company. GFCL also owed many companies and SIFH paid the outstanding bills to win the bid for the company.

Mr. Mikuni (JICA) interjected that this is a case of Government versus Private sector. He pointed out that the objectives to donate the facilities are for improved social and economic benefits of fishers and increase supply of fish to the local market and are not specifically for the success of one company. He also reminded the meeting that it was not the intention of the government of Japan to lease these facilities to private companies. He pointed out that fisherman cooperatives and government organizations could learn something from this operation. He

added that this company provided additional service to the fishers and thus increased the supply to meet the demand of the local market and increased economic benefits. Mr. Haughton commended Mr. Mitchell for a well-done presentation, however concern was raised that it reflected the company's opinion regarding their policy and the relationship with the fishers. It was noted that the fishers' perspectives should have also been shared. Another point of concern was the fact that the government is a major shareholder in the company and an enquiry about the actual percentage was made. The issue of regulation and standards in place (e.g. no purchase from fishers who don't meet the standards) was discussed and the importance of having standards for processing companies was noted. The importance of understanding the role of the government and the framework for the company's operations were highlighted. A query about the challenges faced by SIFH was also made.

Mr. Mitchell indicated that he could not speak to the percentage owned by the government. In terms of standards and regulations, he indicated that the company did not deviate from these. He also pointed out that a series of workshops were conducted around the island to encourage the use of ice and that larger fishing vessels must be registered and on board specifications met. In terms of species other than yellowfin tuna, it was noted that the purchasing criteria were not as strict. The Bureau of Standards and the Ministry of Health are the agencies responsible for setting national standards and regulations and regular visits are conducted once a month to ensure that national standards are being met. The meeting was also informed that Spice Isle Fish House does not export to the EU, but rather the trading vessels. All fish processing plants are under these regulations, and if deviations from these occur the government could revoke the license or not renew it.

In terms of EU certification, Mr. Ian Horsford (Antigua and Barbuda) raised the point that that the Competent Authority (CA) is responsible to review the facility to ensure that the EU standards are being met. There is a difference between standards and technical regulations. All countries have local standards, In Antigua, for example, there is less efficiency on the exporting side because the fishers determine the price and this reduces the profit for processors. Fish is therefore imported to subsidize. These models need to be weighed against each other for a clearer picture. Mr. Mitchell (Grenada) added that there are three processors, and SIFH always offers \$0.50 more to fisherman for their product. Therefore fisherman will always get more from them if they meet the requirements.

It was noted by Mr. Sato (JICA) that SIFH, operates as a cooperative, and is similar to fisheries cooperatives in Japan, and that the 'bonus' that is offered to fishers is similar to how dividends in a Japanese cooperative work. He also indicated that depending on the taxation system, the company might be doing better than a cooperative. He also enquired about the total number of fishers in Grenada and the proportion that deals with SIFH as opposed to other processors. He pointed out that all fishers should enjoy the economic benefits, not only those that sell to SIFH. The possibility of exporting additional species was also discussed. Mr. Mitchell (Grenada) replied that if 80% of fishers are involved in the yellowfin tuna fishery, at least 45% sell to SIFH. He also indicated that SIFH is trying to expand their fisherman base and is willing to purchase all types of fish from East Coast by propositioning fishers on the East Coast.

### 3.3 “Status of Antigua and Barbuda’s Fishery Export Regime regarding the European Union in 2011”

Mr. Ian Horsford, Senior Fisheries Officer / Food Safety Specialist, Antigua Fisheries Division delivered a presentation entitled “Status of Antigua and Barbuda’s Fishery Export Regime regarding the European Union in 2011.”

#### 3.3.1 Presentation Summary

The key to meeting EU requirements for import of fishery products lies in addressing the following four core areas:

**Infrastructure** – from the vessel used for fishing to the vehicle used for distribution, all infrastructures involved in production, processing and distribution must meet EU technical requirements.

**Operating Procedures** – Sanitation Standard Operating Procedures (SSOP), Good Manufacturing Practices (GMP) and Hazard Analysis and Critical Control Point (a preventive-based food safety system) must be in place.

**Human Resource** – the staff of fish processing establishments, markets, etc. as well as the Competent Authority must have the required training and necessary resources; the Competent Authority is responsible for verifying that any product exported from third countries (countries outside the EU) is in compliance with EU food law.

**Legislation** – legislation of exporting country must be at least equivalent to the EU and the Competent Authority must have the necessary legislative authority to control exports.

By addressing the fore-mentioned, Antigua and Barbuda was able to be included in the list of third countries for which the import of fishery products is authorised. The passage of EC Regulation 1005 / 2008 on Illegal, Unreported and Unregulated (IUU) Fishing now adds a "sustainability" criteria to the food safety and quality assurance technical requirements for imports. This regulation which took effect from **1 January 2010** requires all seafood entering the EU to be certified as having been caught legally and provisions are in place for the EU to adopt retaliation measures against States and vessels involved in IUU fishing. The presentation is attached as *Appendix 3*.

The following supporting documents were also made available electronically to participants: Standard Procedural Manual for the Safe Handling of Live Lobsters in Antigua and Barbuda and Procedural Manual for the Approval and Assessment of Live Lobster Exporters in Antigua and Barbuda

([http://www.fisheries.gov.ag/information/publications/pdf/Standard\\_Procedural\\_Manual\\_for\\_Live\\_Lobster.pdf](http://www.fisheries.gov.ag/information/publications/pdf/Standard_Procedural_Manual_for_Live_Lobster.pdf)). It was noted that these documents were prepared in 1998 and are due to be updated.

### 3.3.2 Discussion

Mr. Phillips (CRFM) opened the discussion by commenting that this was a well-structured presentation and noted that in terms of the EU, one needed to be regularly updating SPS and related regulations when exporting to the Europe, since the EU, as a major importer, are constantly upgrading their standards / requirements. He also pointed out that the region, should seek to develop a core / minimum set of standards in fisheries that would meet the local, tourism market, and export requirements. The meeting was reminded that at a previous CRFM SPS workshop, countries had considered the development of such a single set of standards. The importance of conducting a critical evaluation of all aspects within the fisheries (e.g. vessels, landing sites and processing facilities) in relation to meeting the EU's SPS requirements was pointed out. It was also indicated that the EU inspectors like to see that the Competent Authority (CA) has a plan to address the issues relating to SPS and that it was being implemented. This way, the CA could also indicate where assistances were needed in meeting the requirements. He mentioned that in situations in which some countries had two CA's, (e.g. one for fisheries and another for agriculture) it might be more beneficial to have one CA covering both areas. Mr. Horsford (Antigua and Barbuda) indicated that the EU approach is a preemptive one and Mr. Phillips agreed with this and suggested that an evaluation of the current SPS situation in countries should be done. It was agreed that there was a need for such an evaluation. Mr. Horsford also agreed that one CA is the best option and that maintaining two CA's is quite costly. Concern was also raised about the fact that very few laboratories accredited to do testing due to low demand for services. Mr. Phillips indicated that some tests needed to be done locally, but depending on the regularity needed and type of testing required consideration could be given to collaboration with a regional laboratory.

Mr. Phillips (CRFM) also commented that CARIFORUM is working on an SPS programme under the EU-CARIFORUM Economic Partnership Agreement and that many of the issues (e.g. SPS legislation, monitoring programmes, etc.) being identified seemed to be validating the need for and direction of the programme. It was recognized that while the programme was being developed at a regional level, national stakeholders needed to be involved. Mr. Haughton (CRFM) added that the Caribbean Agricultural Health and Food Safety Agency (CAHFSA) is an important new agency that was established in 2010. Their mandate includes fisheries and regional food safety, but it is still in the developmental stage. The meeting was reminded that countries should ensure that the fisheries sector is included under this mandate and the challenge for specific companies and individual countries laboratories to establish linkages with CAHFSA was noted. The meeting was also reminded about the project looking at Sanitary and Phytosanitary Standards (SPS) and fisheries should get off the ground with this soon. It was noted the recent EU SPS project involved various countries, but some countries benefited more than others and the point was raised that even though facilities exist, the associated benefits may not be realized unless you push the fisheries sector to become compliant with these standards. Mr. Horsford (Antigua and Barbuda) also added that there is a transfer benefits across the board in that if the product is good enough for the EU market, it is good enough for the tourism market. He also suggested Inter-laboratory testing can be used as a short stop. Mr. Haughton (CRFM) commented that legislation is important and it sets the basic framework on which to build. The importance of the documentation system and manuals on all the procedures

was noted. This is a systematic and logical approach that was recognized as one which could assist other countries in moving into the export market.

Mr. Mikuni (JICA) enquired if logbooks were a requirement for the export to the EU and how difficult it was to get fishers to meet this requirement. Mr. Horsford (Antigua and Barbuda) clarified that fisherman are supposed to make returns to the chief fisheries officer, but this is not implemented because within the Fisheries sector, in terms of literacy rates, etc. it is harder to collect this information from the fisherman. There was a consensual agreement with this point and following discussions centered on how to improve this issue. Mr. Patrick Palmer (Antigua and Barbuda) added that there needs to be clarification to the fishers that we don't need their exact fishing spots just the general areas they are getting their fish from (as it relates to possible contaminated areas such as those associated with Ciguatera). A solution would be if it were possible to put radio tags on each vessel.

Mr. Sato (JICA) queried if the shipment was of live lobsters, and if so, inquired about the mortality rate during transport. It was clarified that the shipment is of live lobsters, and because the distance is short (flying time is approximately 15min) there is not significant mortality and when transferred by boat, the longest trip is 2 hours. In house aquarium or crawls at sea are also used to keep lobsters alive until they are shipped and this represents a "critical control point" regarding water quality, conforming to the HACCAP method.

At this point discussion was suspended and a video clip on Hazard Analysis Critical Control Point (HACCP) was shown.

Mr. Ishida (JICA) closed the discussion and commented that HACCP itself is not a huge entity and noted that if Sanitary Standard Operating Procedures (SSOP's) are already in place, then HACCP can be implemented step by step. The FDA is responsible for checking facilities, and the importer in the USA is responsible for the HACCP in the origin country. Therefore, SSOP's must be submitted to them. However, the EU is different, as they will come and check the facility. The importance of consistent testing was noted.

### **3.4 "St. Lucia Fish Marketing Corporation Limited, Frozen Fish and Product Development"**

Mr. Jerson Badal, Senior Manager, St. Lucia Fish Marketing Corporation Limited delivered a presentation entitled "St. Lucia Fish Marketing Corporation Limited, Frozen Fish and Product Development."

#### **3.4.1 Presentation Summary**

The St. Lucia Fish Marketing Corporation Limited (SLFMC) was registered in 1984, originally funded through the Canadian International Development Agency (CIDA) and later through the Japanese Government. The main objective of the corporation is: to organize, promote and develop St. Lucia's fishing industry in the interest of St. Lucian fisherman. There are currently three facilities in operation: Castries Plant, Vieux Fort Plant and Dennery. Problems faced by the SLFMC include: the lack of selection requirements for fish catch, the fierce competition with

vendors, the dumping of undesirables, a guaranteed price system and a faulty payment plan with fishers. Further challenges faced by the SLFMC are the lack of funding for promotion and advertising, the local notion that “frozen fish is bad fish”, imports, quality assurance, inventory management and a lack of technology.

The main focus of the SLFMC has been marketing. Examples include: pairing healthy living with fish consumption, product development (e.g. “The Sustainable Seafood Festival”), and exporting fresh snapper to North America. The local niche Markets exploited by SLFMC include: school canteens, business canteens, households, small restaurants / fast food buyers, walk-in customers and unions (e.g. Nurses). The Corporation offers special perks to maintain relationships with customer including: special discounts on holidays, free delivery service, sample tasting, custom orders, and credit facilities. The presentation is attached as *Appendix 4*.

### **3.4.2 Discussion**

Mr. Mikuni (JICA) led the discussion and noted that this is a good practice in the face of many problems. He pointed out that the facility achieves JICA’s objectives with regards to fisherman relations, but has many conflicting problems. With regard to purchasing unpopular fish, regional trade should be considered as opposed to international trade (US and EU). The importance of educating the St. Lucian public about the improved quality of fish stored on ice was highlighted. Mr. Phillips (CRFM) commended the presentation and noted that shifting the focus from the production / supply side to one that is more market driven is a positive move when looking at the whole company. It was recommended that the entire company needed to be reviewed to bring it in line with such a direction and a policy shift would be necessary. The policy should serve to provide guidance as to whether the goal of the organization is profit, cost recovery or breaking even. The need for an outline describing the approach to be used was recognized and it was recommended that consultations with all the stakeholders would be necessary to obtain buy-in to the new market driven direction. In terms of value added activities, it was pointed out that the facility and operations may need to be evaluated and some sections modified or extended. It was noted that many market opportunities were available to St. Lucia and these should be explored. Mention was also made of the CSME and the opportunities for marketing in the region, but it was pointed out that this would require good marketing intelligence and knowledge of the species available, seasonality, etc. Mr. Badal (St. Lucia) clarified that this facility was originally intended for the fisherman. Throughout CARICOM, policy makers support the supply side and not demand side of transactions, which makes it difficult for policy decisions to be made because the fishers are content which leads to a lack of incentive to change. Mr. Phillips (CRFM) commented that there should be a policy shift, as it is necessary to know where you want to go and determine the costs associated. At present, fishers may appear to be happy because they are being subsidized. However, if stakeholders are on board and understand the importance and benefits of marketing then the transition may be easier. Mr. Haughton (CRFM) supported this and further added that the clarification of objectives is necessary. Under previous objectives of these facilities, they may have been met in terms of social functions. The need to ensure that competent people are involved in running these facilities was noted. Mention was made of the regions high import food and fish bill and it was pointed out this was a great opportunity to provide fish and satisfy this need with awareness building and marketing efforts. The promotion of fish consumption as a healthy alternative is recognized globally and is also a useful marketing

strategy. Mr. Horsford (Antigua and Barbuda) supported this as well and added that the sustainability approach is the method to move forward. Using sustainability as a grading system has implications for fishers, and sooner or later they may be locked out of a market because of the sustainability issue.

Mr. Mitchell (Grenada) commented that other fisheries facilities in the region are envious of the storage capabilities in St. Lucia. He inquired about issuing of the licenses to import fish when there are storages full of fish that can't be sold. Mr. Badal (St. Lucia) clarified that the Fisheries Department issues the licenses and the importers house products with a shift in tariff line e.g. Dolphin fillets versus frozen Dolphin. Mr. Mitchell (Grenada) further added that, in terms of public relations, it seems St. Lucia is moving forward, which is very important and he noted the need for stakeholder involvement in order to appreciate the value of yellowfin tuna

Mr. Lorenzo George (SVG) brought attention to the exorbitant costs and enquired about how close the maintenance personnel were involved. A suggestion was made for a cost analysis of equipment on a monthly basis. The fixed price for fish purchases was another issue as well as storage costs.

These issues were addressed by Mr. Badal (St. Lucia) who noted that the majority of the freezers have separate meters and that, because the facility was donated, the community frequently utilizes the utilities. In terms of storage, it was indicated that selling prices during the year were adjusted (e.g. fresh products are sold differently from frozen fish). He added that consultants were hired to help conserve energy. An example of an improved method of measuring the temperature of the actual fish instead of the air temperature was given, however, this shift requires technology changes, and they are awaiting further results. Mr. Jullan Defoe (Dominica) indicated that the blast freezer at the SLFMC May not be necessary as it requires a lot of energy and the same rapid cooling could be achieved using a cheaper method e.g. ice slurry. Mr. George (St. Vincent and the Grenadines) supported this point.

#### **4. Japanese experience of fisheries cooperatives' business: Consignment, sales and financial services**

Two presentations were made by Mr. Masaaki Sato, entitled "Photographic Introduction to Fisheries Cooperative Associations," and "Major Businesses (Credit, Marketing and Supply) of Fisheries Cooperative Associations in Japan."

##### **4.1 "Photographic Introduction to Fisheries Cooperative Associations"**

A review of Japan's fisheries cooperatives, fishing activities and retails services was done through photographs. The presentation is attached as *Appendix 5*.

## **4.2 “Major Businesses (Credit, Marketing and Supply) of Fisheries Cooperative Associations in Japan”**

### **4.2.1 Presentation Summary**

The presentation focused on an introduction to fisheries cooperative associations of Japan, marketing business, credit business (banking and borrowing services), supply business (bulk purchase and retail sales), fisheries insurance, and issues which need to be considered when transferring Japan's FAC system to developing countries. The presentation is attached as *Appendix 6*. A report on the Major Businesses of Fisheries Cooperative Associations in Japan is available at <http://www.caricom-fisheries.com/ComingEvents/tabid/57/Default.aspx>.

### **4.2.2 Discussion**

Chris James commented that the Caribbean system is basically the same, just at a smaller scale and noted that fishers have inadequate financial resources and it is difficult to deprive them of the necessary means for their livelihood (i.e. fuel or tackle). The issue of money being “tied up” in receivables was also raised. Mr. Sato (JICA) responded that a possible solution is ‘Harvest insurance system’ and ‘aquaculture insurance’. In the fisheries insurance system, the member fisher has to pay a premium and must continue to sell his catch through the cooperative. The cooperative has a record of each individual members yearly income, so if the fishers’ income is lower, they are paid harvest insurance up to a maximum of 80% of net loss from previous yearly income. In the aquaculture insurance system, if there are escapees from seacages, then there is an insurance policy instated to account for losses.

Ian Horsford (Antigua and Barbuda) inquired if the average income of individuals inside the program was higher or lower than those outside the program and if the system could lead to under performance of fishers. Mr. Sato (JICA) responded that those who are insured, on average, are good performing fishers. The high premium they have to pay counteracts the desire to underperform but the ‘moral hazard’ does exist. It was also noted that because the cooperative contributes to community development as a whole, the community holds the cooperative in high regard. The meeting was reminded that the most important function of the cooperative is education and training (through guidance activities).

Terrence Phillips (CRFM) indicated that it was an interesting and informative presentation and agreed that the principles are universal. He noted that Japan was far ahead and within the region it is more supply side oriented and fishers are encouraged to go out and fish e.g. sympathy to fishers is common and credit is given even though repayment is not completed. In this scenario, the business is subsidizing the fishers and credit issues need to be addressed. The fact that the cooperatives do not fully understand their operating costs and therefore the real charges are not being realized was raised. The importance of marketing intelligence was highlighted in addition to understanding how the fishery is operating. The need to have a good information system which is based on research about regional and global production was also discussed as well as the need for proper agreements between buyers and sellers. The meeting was reminded that good facilities and quality assurance are also necessary for marketing in addition to the other marketing aspects such as auctions at the facility. It was recommended that cooperatives could

focus on either the marketing aspects or providing services. The difficulty of implementing insurance schemes for the region was noted. Mr. Haughton indicated that there are successful cooperatives and gave the Belize example. He noted that the challenge is with fishers respecting their obligations with regards to credit. The meeting was informed that the cooperatives in Belize were involved in processing and exports, capacity building and at the end of the fishing season the fishers received dividends and bonuses. The lack of transparency in the Caribbean situation was listed as a major issue. The fact that Japan has strong regulations and sanctions while the Caribbean does not was also raised as an issue for review. Mr. Sato agreed that regulations and sanctions developed from the top down do not work and need to be created in collaboration with the fishing community. All countries were in agreement with this point. Mr. Makuni (JICA) added that members within Japan's FCA's have fishing rights, and must comply with regulations or they lose their rights.

## **5. Challenges facing the management of fisheries facilities: Experiences in St. Vincent and the Grenadines**

### **5.1 “Establishing a Sanitary and Phytosanitary System to meet EU Requirements”**

Dr. Lucille Grant, Fisheries Officer-Quality Assurance and Product Development, Fisheries Division, St. Vincent and the Grenadines delivered a presentation entitled, “Establishing a Sanitary and Phytosanitary System to meet EU Requirements.”

#### **5.1.1 Presentation summary**

A brief history of the EU inspection was given: there were two, one in 2000 and the other in 2008. The 2008 mission concluded that although the control system developed with regard to fishery products was developed, the effectiveness could not be evaluated as it wasn't being implemented at the time of the mission and three recommendations were made: The CA should ensure:

1. “that the training of all staff involved in signing of the export certificates and performing official controls in relation to the Community fishery product export requirements is further enhanced in order to ensure adequate knowledge”
2. “that a programme based on the HACCP principles in accordance with Article 5 of Regulation 852/2004 is in place, implemented and maintained at the establishments”
3. “that standards equivalent to those laid down in Regulation (EC) No. 852/2004 are implemented and controls should be established in this respect”

In response to these recommendations, an action plan was developed and in 2009 the CA made a request through TradeCom Facility for assistance with implementing necessary corrective actions. Three consultancies which looked at official controls, laboratory, and establishments were completed in 2010 and since then, the CA has commenced the evaluation and implementation of recommended tasks. The identified pending issues and the way forward included: updating the legislation; building lab capacity; continued enforcement of legislations and official procedures; plan a national strategy to address IUU requirements; obtain JICA

technical assistance during the next five months to guide two lobster facilities towards EU compliance.

The case study of improvements in quality assurance and management at the National Fisheries Marketing Limited was also presented. Notable upgrades at the facility included: concrete landing facilities; ice machines and cold storage; unidirectional product flow; and fitted ice holds for vending. Training sessions in good practices are also held regularly for market personnel. The presentation is attached as *Appendix 7*.

### **5.1.2 Discussion**

Mr. Horsford (Antigua and Barbuda) queried about the relationship of the Public Health Department and the Fisheries Division in regards to an agreement of management. Dr. Grant (SVG) commented that public health handed over management easily because of the harsh requirements of the EU. The Fisheries Division was willing to take the challenge and the working relationship between Public Health and the Fisheries Division is strong.

## **5.2 “Improving the Operational Efficiency of Fisheries Facilities”**

Mr. Hyrone Johnson, Fisheries Officer, Fisheries Division, St. Vincent and the Grenadines delivered a presentation entitled: “Improving the Operational Efficiency of Fisheries Facilities”

### **5.2.1 Presentation Summary**

Calliaqua is the most southern landing site located on St. Vincent and the Grenadines out of a total of nine facilities. The Calliaqua Fisheries Centre was completed in 1997 through a Japanese Grant Aid Programme. The facilities and services include: jetty; lockers; ice making machines; cold storage; toilet and shower; a fuel depot which isn't currently functioning; and a retail market. The centre was leased to the Calliaqua Fisherfolk Cooperation (CALFICO) in 2004. In running the centre, CALFICO has experienced many problems including: financial difficulties; poor hygiene standards; and accountability issues. A committee as recommended by the Fisheries Division, was put in place to address these issues. Short term activities, which were identified for the committee included: assuming control of the facility for six months; developing a management team; establishing an appropriate accounting system; and reconnection of the utilities. The long term activities, which were identified included: construction of additional lockers; re-establishment of the fuel depot; and construction of a fish cleaning area. Cost cutting measures such reducing energy use and using sea water where possible instead of tap water were also identified.

The challenges have included; fishers being reluctant to pay for use of the facilities and inadequate participation in management; lack of funding; and old / poorly maintained machinery. The proposed expenditures total \$6680 EC, while the proposed income total is \$6300 per month. However, the actual income and expenditure statement for the July - December 2011 period was \$7891.40 and \$15,938 respectively resulting in a loss of \$8046.95. Training workshops on institutional strengthening, capacity building and business management for all the stakeholders

have been identified as a way forward, in addition to formulation and implementation of a management and operational plan. The presentation is attached as *Appendix 8*.

## **5.2.2 Discussion**

Ms. Petronila Polius (St. Lucia) inquired if safety gear was included in operational costs and also added that fisheries cooperatives needed to take more responsibility when it comes to operational costs instead of depending solely on the Fisheries Division. Mr. Johnson (SVG) clarified that capital costs include safety gear and that it is necessary to have the proper safety gear in place to acquire registration. He also added that there are future plans to revitalize the fuel business. Mr. Horsford (Antigua and Barbuda) commented that it was hard to hear the stories of struggle that were presented and noted that “Political Will” was a reoccurring theme. Implementation was also noted as a problem. Mr. Haughton (CRFM) agreed that there is a fundamental problem and that these models cannot make profit the way they are currently structured. It was reiterated that the stakeholders needed to decide what type of organization they require (service, marketing, etc.). The types of activities that will generate profit are the ones that the cooperatives are involved in such as providing services, credit etc. and clear objectives need to be agreed upon in order to determine the appropriate operational plans. Mr. Sato (JICA) supported this point. Mr. Chris James (St. Lucia) left a final comment that the Japanese facilities are good facilities, but fishers in the Caribbean do not fully utilize the facilities and therefore more consultations are required. Mr. Johnson (SVG) supported this point

## **6. Useful Tools**

### **6.1 Cost-Benefit Analysis of Fisheries Centres**

Mr. Kei Kusaka, a JOCV stationed in Owia, St. Vincent and the Grenadines delivered a presentation entitled “Cost-Benefit Analysis of Fisheries Centres.”

#### **6.1.1 Presentation Summary**

The most important part of analysis is considering the life span and implicit values (cost and benefit). CBS (Cost Benefit Analysis) is used for project evaluation. Also, it helps in recognizing whether projects make profits or deficits over the life span. Fisheries centers have intangible costs and benefits, in other words, capital costs and social benefits. The costs and benefits are converted to monetary values. Life span of fisheries centers is assumed and future values are converted to present values. The present values of costs and benefits are added up respectively, and they are compared. In this analysis, the total present value of costs was approximately \$10,000,000 higher than that of profits. The gap should be filled with tangible profits from new businesses and improvement of current businesses. The presentation is attached as *Appendix 9*.

#### **6.1.2 Discussion**

The presentation was summarized by Mr. Mikuni (JICA) who reminded the meeting that the cost and benefit of the fisheries facilities, most of which are constructed by the foreign aid, are not

usually accounted for in the OECS countries. It was pointed out that although maintenance and refurbishment of facilities account for a large cost, due to public use, the revenue generated generally do not allow recovery. It was indicated that public funding should be used for the facilities and in this way the accountability would be on the taxpayers. The reason given was that the economic and social benefits generated by the facility should be converted to a monetary value and this would allow the taxpayers to understand the real benefits. He added further that the public facilities request cost recovery within their mission, and that a cost benefit analysis can set cost recovery as an objective, which is the first step of action planning.

## **6.2 Project Cycle Management**

Mr. Terrence Phillips of the CRFM Secretariat made a brief presentation entitled: “Project Cycle Management.”

### **6.2.1 Presentation summary**

In preparation for the working group exercise on action planning, Mr. Phillips (CRFM) gave an overview of the Project Cycle Management (PCM) tool. He mentioned that it had been introduced by the IC Net Limited team during the implementation of the recently completed CRFM / JICA Master Plan Study and had been used in the background review field studies, aquaculture development planning workshops and FADs pilot study. In the presentation, he outlined the PCM approach to planning and implementation and covered such aspects as Stakeholder Analysis, Problem Analysis, Objective Analysis, Project Selection, Project Design Matrix (PDM) and Plan of Operation. The presentation is attached as *Appendix 10*.

## **7. Practices of Stake holder analysis, Problem analysis, Objective analysis, Project design matrix, and Plan of Operation**

### **7.1 Participatory Planning**

Participants worked through the following three case studies:

Case 1: Hygiene practices at the Kingstown Fish Market

Case 2: Financial Revitalization of Calliaqua Fisheries Facilities

Case 3: Project development for under-utilized products at St. Lucia Fish Market

As a result, Problem analysis, Participatory analysis, Objective Analysis and PCM making were practiced. Participants identified the role of each stakeholder and several outputs that should be undertaken for achieving the objectives stated clearly in each case e.g. Project Goal and / or Core Objective.

#### **7.1.1 Case 1: Hygiene practices at the Kingstown Fish Market**

The National Fisheries Marketing Limited (NFML) is one of best facilities in the OECS countries in terms of hygiene standards and working toward export to the EU and USA market. The Project Goal was set as “Development of Adequate Sanitary and Phytosanitary (SPS)

Capability in NFML” and the management and financial issues were focused on achieving this goal. The outputs of the group are attached as *Appendix 11a*.

### **7.1.2 Case 2: Financial Revitalization of Calliaqua Fisheries Facilities**

Calliaqua Fisheries Facilities provides many services to fishermen. The Project Goal, “Improving the Financial Management of Calliaqua Fisheries Facilities” was identified as one of the key issues for “Financial Revitalization of Calliaqua Fisheries Facilities.” The outputs of the group are attached as *Appendix 11b*.

### **7.1.3 Case 3: Project development for under-utilized products at St. Lucia Fish Market Cooperative Limited**

The abundance of under-utilized Skip Jack Tuna in St. Lucia was identified as the issue, and the St. Lucia Fish Market Cooperative (SLFMC) was identified as major stakeholder for this case study. The two Project Goals included:

1. “To Increase Sale of Skip-Jack Tuna Year-round”
2. “Product Diversification to Enhance Sale and Viability at SLFMC”

The outputs of the group are attached as *Appendix 11c*.

## **7.2 Discussion**

Mr. Ishida noted that the focus of the working groups was on both the management and financial aspects of good practices and identifying the issues of importance using the discussions held throughout the workshop, to form the bases of these planning practices.

It was highlighted that in order to develop these plans, the following points should be considered:

1. Further discussion with stakeholders
2. Forming a list of necessary inputs and activities for each desired output, which should then be reviewed by the stakeholders.
3. Involvement of fisheries officers with all main stakeholders, especially with the monitoring and evaluation of each step, under the observation and direction of the Department of Fisheries and/or Fisheries Division.

## **8. Facility Reports**

Facility reports were also provided by the following countries:

Dominica: Newton Fisheries Cooperative (*Appendix 12*)

Grenada: Gouyave Fish Market and Grenville Fish Market (*Appendices 13a and 13b*)

Nevis: Nevis Fisheries Complex (*Appendix 14*)

St. Lucia- Choiseul Fisherman's Cooperative and Anse La Raye Fishing Port (*Appendices 15a and 15b*).

## **9. Way forward**

The following activities were discussed and agreed upon for the formulation of Action Plans:

1. Description of situation: Stakeholder analysis (Problem analysis, Objective analysis, Project design matrix) followed by an overall goal, project objectives, output and finally activities
2. Plan of Operation (break down of activities/tasks, discuss indicators to monitor progress and create a deadline)
3. Country workshop to share the output of the workshop and the draft action plan
4. Finalizing and authorizing the action plan
5. Implementing the action plan
6. Regional workshop to share the good practices generated from the actions

## **10. Tasks to be completed**

The following tasks to be completed were agreed upon by the participants:

1. Schedule for the formation of Action Plan
2. Network for the promotion of action plan and good practices
3. Report on the Workshop
4. Share output of workshop on CRFM website

Mr. Mikuni reminded the Meeting that commitment of the countries to complete and implement the Action Plans were the most critical steps in developing the fisheries sector. He also thanked the participants for their involvement and acknowledged it as a sign of their commitment.

### **10.1 Discussion**

Dr. Singh-Renton (CRFM) reiterated that the purpose of the exchanges and sharing of the case studies throughout the workshop has led to some level of achievements in the marketing field and lessons were also learned along the way. The challenges that remain were noted, but it was pointed out that the aim is to continue to strengthen the skills within countries so as to keep

moving forward to the next step. She asked attendants to consider a schedule to develop an Action Plan, and elaborated on the explanations already provided by Mr. Mikuni concerning the Action Plans required. The Workshop agreed that it was important that the Action Plan was realistic and hence achievable and that goals needed to be set that were practical / attainable / realistic with the available resources. Participants were also reminded that Mr. Mikuni and Mr. Ishida would continue to be available for a few months to assist countries with the development of their respective Action Plans.

Mr. Mitchell (Grenada) commented that, in terms of government control, strong and precise recommendations to the agencies responsible are essential. Mr. Phillips (CRFM) reminded the meeting that action planning at the regional stage needed to be looked at it in different levels. These included: national workshops to be held where participants can facilitate the action planning and those decisions that need to be made at a government level can be discussed; and development of individual working groups where examples of case studies could be shared. Mr. Haughton (CRFM) clarified that all stakeholders, including the government, need to be identified and engaged in the entire analysis to ensure a cooperative process. Based on the discussions of this workshop, it has been identified that 'personal problems' regarding skills and competency are a common theme. It was noted that strong leadership is critical, and will be a key tool in mobilizing resources through the government.

Mr. Mikuni (JICA) added to the discussion that this approach is bottom up at a political level. Since JICA representatives do not currently have the channel to the respective policy makers, a possible outcome of the encompassing island workshops will be to set up the necessary meetings between policy makers and technocrats. Dr. Singh-Renton (CRFM) elaborated that, depending on the country; there is flexibility when it comes to involving policy makers. The engagement of government was emphasized especially in dealing with issues at an international level. A conclusion was drawn that information sharing and training opportunities as a cooperative effort between countries needs to be continued following the conclusion of the workshop.

The workshop was reminded by Mr. Ishida (JICA) that Island workshops will be held, and time limits are flexible. It was indicated that JICA is willing to hold multiple workshops in areas of interest and welcomes communication and ideas for future workshops.

Dr. Singh-Renton and Mr. Haughton from CRFM further acknowledged the availability of JICA's representatives and encouraged representatives to take advantage of this resource. It was reiterated that countries are expected to produce specific Action Plans, which have the potential to lead to further development. Once drafted, Action Plans should be available for sharing amongst countries.

## **11. Closing Remarks**

Milton Haughton (CRFM) closed the workshop by thanking the JICA representatives and the government of Japan. He noted that there have been significant improvements in the fisheries sector at the national and regional levels and hopes to continue these cooperative projects. He acknowledged that the current workshop issues are important within the fisheries sector and that policy makers and stakeholders will both benefit. It was recognized that if progress is made with

respect to international export markets and quality control, the prospective outcomes will lead to significant improvement in fisheries organizations and increase the incomes of fishers. The numerous multiple opportunities for improvement across the region with respect to quality and trade were noted.

Mr. Haughton acknowledged the support and knowledge exchange of both JICA and the Caribbean representatives. Acknowledgement was also given to the presenters of the individual case studies. The idea of sharing this information with respective Ministers during council meetings as topics of interest within the fisheries sector was raised and it was suggested that case studies, such as those presented during this workshop, would be useful to share with Ministers as this would sensitize them to the reoccurring fisheries sector issues and encourage support. Mr. Haughton left a final remark that the future within the Caribbean fisheries Sector is one to look forward to.

## APPENDIX 1: List of Participants

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## APPENDIX 2a: Grenada Tuna Fishery

# GRENADA TUNA FISHERY

Fisheries Officer (MCS) 15<sup>th</sup> – 17<sup>th</sup> February, 2012  
Kingston St. Vincent & The Grenadines

Presented By:  
Mr. Moran Mitchell  
Fisheries Officer II (MCS)

### The Tuna Fishery In Grenada

- IT IS ALIVE - Not dead or inanimate.
- IT IS VIBRANT – Bursting with energy or activity.
- IT IS ROBUST – Full of health and strength.
- IT IS SUSTAINABLE – Capable of being sustained.
- IT IS MANAGABLE – We direct and control this fishery.
- IT GENERATES FOREIGN EXCHANGE – It brings money into the economy.

### Fishing Vessels

Grenada has a fishing fleet of over 700 vessels.

- Over 180 commercial Tuna Long-liners.
- 87 large long-liners (30 – 60 feet) with Inboard engines: Ice hold and bait Well.
- 26 medium-size long-liners (24 – 29 feet) with cabin, outboard motor and bait well.
- 52 small long-liners without cabin, outboard motor and bait well.
- 15 open deck pirogues, out board motor and no bait well.

### Examples the Different Types of Tuna Long-liners



### Fishing Gears

MAIN GEAR

- Surface long-line gear.

## Gear Composition

- Mono-filaments plastic line
- High flyer /Beacon lights
- Orange/White Bullet Buoys
- Braided Nylons
- Snap on connectors with swivels
- Aluminum sleeves
- Color beads
- Stainless steel hooks

## Fishing Operations

- Set line from 6:00 a.m. - 12:00 noon
- Soak Time: 12 noon to 6:00 pm
- Retrieve line: 6:00 pm until

## Fishing Ground

A body of water where the fishing is usually good.

- Best ground for fishing:
- Where food is abundant
- Ideal water temperature
- Water Clarity
- Inshore and offshore of the continental shelf

## Seasonality

- Fishing is conducted all through the year.
- November to June is the peak season for all fishing.
- July to October is the slow period.

## Catch

Catch Depends On:

- Availability of bait
- Weather conditions
- Buyers

## Species

- Main Species targeted: Yellow Fin Tuna/  
ThunnusAlbacares.
- Other Species targeted: Marlin, Sail Fish,  
MahiMahi, Kingfish, Shark.

### Volume

- Amount in Quantity – Large or small Amount
- 2, 107, 602 80 lbs landed from 2003 – 2010 -EC 68, 884, 351.46 9 (By Catch)

### Value in terms of export

- 5, 312, 62. 40 lbs – Exported to NA – value at E.C 55, 639, 913. 75 (SIFH).2003-2010
- 184,555 lbs. E.C.\$ 3,004,376.7 (SFA).2011
- 96,660.00 lbs. E.C\$ 1,243,289.51 (NSL) 2011
- 795, 354. 91 lbs \_ Exported to Canada - Valued at E.C 9, 826,088.59 (SIFH).
- Total pounds exported: 63,991,840.
- Total Ec. dollars: 69,713,668.55

### Buy Catch

- The majority of buy catch species are sold on the local market.
- King fish, MahiMahi, & blue marlin are sold to restaurants and supermarkets.
- Sail fish & Shark are sold at the fish markets

### PROBLEMS FACING THE INDUSTRY

### Reduction of Fishing effort

Causes:

- Unavailability of bait
- High fuel price
- Lack of commitment
- Unavailability of essential materials (fishing gear)
- Reduction of fishing space

### Market Price

- Quality of fish
- Buyers offer less for fish – glut on international market.
- Fishermen remain ashore due to reduce fish price
- Local market starved for fish
- Supermarkets, hotels, Restaurants suffer

### Competition with foreign fishing vessels

- Foreign fishing vessels pay more money for bait
- Imported bait (squid) is too expensive
- Foreign vessels fish in our waters
- Livelihood of fishers are threatened.



### How can these problems be solved?

- Government, fishermen, and other stakeholders must have or take a conscious co-management approach to these serious issues and come up with the best available solution.

### What is the Yellow Fin Tuna?

- It is a marine fin fish better known as turgeon, ahi, slender tail, Alison tuna.
- It is a resource of high value potential.
- It fuels the economies of developing states.
- Support the livelihoods of tens of thousands of people.

### Where do they live?

- In the deep ocean waters
- Above and below the thermocline (a thermocline is a thin but distinct layer in a large body of fluid (e.g. water, such as an ocean or lake) At temperatures of 65 – 88 degrees Fahrenheit

### Where do they come from?

- From all oceans of the world: Both temperate as well as tropical regions except the Mediterranean



## Where do they aggregate?

- The Gulf of Mexico
- The Caribbean Sea
- Along continental shelves
- Around FADS in any deployment location



## Where do they spawn?

- It is believed that they spawn in Primary spawning grounds in the Atlantic.
- Gulf of Mexico
- Gulf of Guinea

## How are they distributed?

- All over the world
- They inhabit the upper and middle layers of the ocean column.
- They roam long distances
- They are found in depth (1600 ft) – 500 m

## How do we know?

Scientists track the distribution pattern by tagging (they can travel 3,100 miles in 90 days)

## Physiology and Behaviour

They have:

- A circulatory system
- Respiratory system
- Powerful muscles
- Agile predators

## PHYSICAL CHARACTERISTICS

The Yellow Fin Tuna ID:

- It is streamline
- The dorsal side is metallic dark blue
- The ventral side is silvery or whitish
- The Dorsal fin and finlets are bright yellow in colour.
- It has twelve visible external distinct parts

## SIZE AND GROWTH

- They vary in size to other tunas
- They grow to maximum size/ length - 6 ft (190 cm)
- They can weigh up to 388 lbs ( 176. 36 kg) world record 1977

## REPRODUCTION AND LONGIVITY

- Yellow fin Tuna lives up to 5-8 years
- Female release 10 million eggs in one spawning season

## FISHERY

- It is among the world most valuable commercial species.
- Targeted in over 70 countries world wide
- It is marketed in fresh, frozen and canned form
- Japan consumed 36% and the USA 31% of the world catch

## METHODS OF CATCH

- Surface long line-pole and line- purse seine net-Rod and reel to a lesser extent
- WORLD RECORDS: (Individual landings)
- 1977 (388lbs) (1992-395lbs) (1993-399.6lbs) (.30<sup>th</sup> Nov. 2010-405.2lbs) (IGA)

## WHAT FOOD DO THEY EAT?

MAINLY FISH:

- Dolphin fish
- Pilchard
- Anchovy
- Flying fish
- Mackerel
- Scads (Jacks, robins)
- They also prey on:
- Cuttle fish-squid-octopus-shrimp-lobsters and crabs



## WHO ARE THEIR ENEMIES?

Yellow fin tunas has four natural enemies:

- Bill fishes: sail fish- Blue Marlin
- Mako shark and the great white
- Toothed and false killer whales
- The main enemy and the high rate of tuna mortality is caused by MAN.



## CONSERVATION AND MANAGEMENT

- ICATT-IATTC-NMFS:
- International Commission for the Conservation of Atlantic Tunas
- Inter- American Tropical Tuna Commission
- National Marine Fisheries Services



THEIR PRIMARY RESPONSIBILITY:

- To set catch quotas
- To operate research and conservation of Atlantic tuna
- To produce the final fishery management plan for Atlantic tunas, sword fish, and sharks

## EVOLUTION OF THE TUNA FISHERY IN GRENADA

- Tuna fishing was artisanal in nature:
- Three units of lines were used by fishermen
- vertical suspension of lines from the bow, mid section and stern of the vessel
- # 0 hook, cable, lead, 1/8 braided nylon & single strand mono filament made up the main gear
- The gear was retrieved on a wooden spool
- Wooden double enders sailing boat were used

## INTRODUCTION

- This method of fishing was introduced:
- In 1980 by the Cubans to the Grenadians Fishermen
- A fleet of 15-18 Cubans long liners were deployed in Grenada
- Fishermen island wide secure their training aboard these vessels
- Trained fishermen introduced this technology to others in the various fishing villages

## TECHNICAL ASSISTANCE

- Government secure soft loans for fishermen
- Better and adequate fishing vessels were built
- To purchase marine outboard motors
- To purchase fishing gears and accessories
- The International Foundation for Agricultural development(IFAD) was the funding agency at the time.

## OTHER ASSISTANCE

Training:

- Fisheries officer and coast guard officers initiated training for fishermen in the following areas:
- Safety and survival at sea
- Seamanship and navigation
- Trouble shooting-Outboards motors
- Fabrication and deployment of the long line gear.
- Radio communication

## BIRTH OF THE LOCAL TUNA INDUSTRY

- Majority of sailing vessels were phased out
- New and bigger fishing vessel were built
- Business men invested in the industry
- Birth of fishermen groups/Associations and cooperatives
- In 1991 Long line fishing was introduced in Carriacou and Petite Martinique- (Grenada Grenadines)

## FISHING AREA

- West coast of Grenada (due west)
- North west of Grenada
- North East of Grenada



## INFRASTRUCTURAL DEVELOPMENT

### JAPANESE TECHNICAL ASSISTANCE:

- In 1991 a new fish market was built by Japanese in Gouyave
- In 1994 a new fish market was built in Grand Mal
- In 2001 a new fish market was built in Melville Street St. George's
- In 2004 a new fish market was built at Grenville in St. Andrews.
- In 2010 a new fisheries complex was built at Gouyave



## LOCAL FISH MARKETS





## BUYING AGENCY

- GOVERNMENT PLEDGE:
- To purchase all surplus fish from fishermen
- Artisanal Fisheries Development Project (AFDP) was the project responsible to fulfill this mandate
- The project was subsidized by the government of Grenada
- The project buys, process and sells fish locally and externally

Cont...

- In 1990 the project received Ec. 500,000.00 from govt. during this period the project experience a net loss of Ec. 258,000.00.
- In 1991 the project received Ec. 215,000.00 from govt. during this period the project experienced a net loss of Ec. 484,000.00.
- In 1992 the project received Ec. 50,000.00 from govt.
- In July 1993 the project was official folded

## THE BIRTH OF THE GRENADA COMMERCIAL FISHERIES LIMITED

THEIR MAIN OBJECTIVE WAS TO DO THE FOLLOWING:

- To attempt to reverse the trend of the losses
- To measure the progress in operations
- To aid in providing more and better quality fish
- To aim at upgrading business management and administration
- To dispose of non profitable activities
- To yield better economic return overall
- To monitor all expenditures
- To take necessary measures

## MONOPOLY

THE GRENADA COMMERCIAL FISHERIES LTD WAS:

- The major buyer of yellow fin tuna on the island
- They control the price to their advantage
- The refused to buy fish without giving adequate notice
- Fishermen remained weeks before they were paid for fish
- Bought large amount of by catch and stored in freezer room
- Local sale was hindered by high retail price for local consumers

## NEW BUYERS EMERGE

LICENCES WERE GRANTED TO FOUR NEW BUYERS:

They were:

- Alex Swan- Now Spice Isle Fish House
- Nordom Sea food limited (NSL)
- Southern Fishermen Association (SFA)
- Caribbean Seafood Limited (CSL)

## GOVERNMENT MONOPOLY ON FISH PRICES WERE BROKEN

### NEW BUYERS CREATED:

- Competition regarding the best price on the market
- Fishermen bargain with the power of choice
- GCFL received less fish to buy

## RESULT OF THE COMPETITION

- GCFL terminated the services of some of its workers
- Reported loss of monies through theft.
- Management salaries were exorbitant.
- Millions of dollars worth of fish was stored in freezer rooms.
- There was no external market available to sell such fish.
- Managers were changed almost every year
- GCFL collapsed after the passage of hurricane Ivan.

## What next?

- An investigation was launched into the company.
- The general manager at the time died during the investigation.
- The electricity company threatened to disconnect the facility.
- Government refused to bail out the company.
- The company folded in 2005-all workers sent home.
- The company was advertised for lease.
- The lease of the company was awarded to Alex Swan
- Other fish exporters flourish during this period.
- And that's how it ended, and that was the synopsis of the Tuna fishery in Grenada during this period.

**THANK YOU!**

**ANY QUESTIONS??**

## APPENDIX 2b: Spice Isle Fish House

### THE EVOLUTION OF SPICE ISLE FISH HOUSE

Presented by Moran Mitchell Fisheries Officer (MCS)  
15-17 February 2012  
Kingston St. Vincent & The Grenadines

- Tuna quality was very high.
- More workers were employed at the company.
- Company formulated a HACCP plan.
- Company was inspected on a regular basis by Health and Fisheries officers.
- Company bid and was awarded the lease contract for GCFL.
- Company paid huge sum of money to reduce the huge debt that GCFL incurred.
- Government remains a major share holder of the company.
- The name "ALEXSWAN" was later change to SPICE ISLE FISH HOUSE.

### FUNDAMENTAL ISSUES

- The GCFL building was phenomenally strong.
- The lay out of the building was not in accordance with the HACCP protocols.
- There were no proper safety nets to prevent flies and rodents from entering the building.
- Internal adjustments were made but there was no structural interference.

### ORGANISATIONAL STRUCTURE

- Has a staff of (24) twenty four members.
- Manager is head of the company.
- Company has a board of directors who advises the company.
- Sales and marketing manager.
- Company has a well trained and experience accountant,
- Company accounts for things properly.
- Experience maintenance manager from the Philippines.
- Every worker job is properly defined.

### PRODUCTS AND SALES

- Fish and fisheries products are the main products of the company.
- Quality of fish is the main concern of the company.
- Advertising products to chefs of hotels and restaurants
- Company maintains that "FISH" cannot sell itself.
- Company use local directory to reach private as well as government institutions, in search for sale.
- Company takes a very close look at cost.
- Company takes frequent inventory.
- Company is very realistic, and will sell fish to meet the poor man pocket.
- Company generates huge profits from the sale of fish.

### BUSINESS MODLE

- Company establishes its own business model.
- Company maintains strict guiding principles.
- Company goal is to purchase as much quality fish for the export market.
- Company ensures that fishermen are satisfied with the company price.
- Company puts fishermen first on its list of priorities.
- Company establishes strict quality assurance principles.
- Company purchase fish from fishing vessels that meets the fisheries regulations requirements.
- Company maintains customer satisfaction.
- Company maintains guidelines in recall procedures.

## PURCHASES:

- The company purchase the best quality fish from fishermen. Grade one, two and three.
- Fishermen must apply the HACCP concepts and principles aboard their vessels.
- All by catch is purchased by the company.
- Company do not buy fish from vessels who do not carry ice out at sea.
- Company purchase fish everyday of the week except on Sundays.
- Company pays fishermen (\$Ec.7.00) for first grade fish-(\$Ec.6.25) for second grade fish, and(\$Ec.5.00) for third grade fish.
- Company pays fishermen "one time, same time" for their fish.
- When fish is scarce on the local market company import fish from external sources.
- Company purchase all their fish export material from abroad.

## SELECTING

- Fish are selected and graded as soon as they arrived in the receiving area.
- The fishermen receives the best price for the best grade fish.
- During the selection process grader will perform an organoleptic test on fish.
- After test is completed company worker immediately place fish in storage compartment where fish is covered with ice.
- The larger size tuna are selected and secure in a special compartment, then covered with ice.



## CLEANING

- Company receive all fish clean and gutted from fishing vessels.
- Fishermen ensure that all fish is clean, bled, and gutted out at sea.
- Company worker will make final check on fish, removing any small portion of vicera from stomach cavity.

## PACKAGING

- Fish is removed from ice and a final organoleptic and temperature check is performed.
- Each boat identification tag is staple upon fish in case of recall procedures.
- Company personel pack fish inside insulated cardboard boxes which displays company identification markings.
- The chest cavity of the tuna are packed with frozen gel packs in order to maintain freshness, temperature, and quality.
- Tuna are also wrapped in a water proof transparent plastic.
- Insulated boxes are then wrapped with plastic straps so as to keep the box cover intact.



## SHIPPING

- The company must secure the space on the airline.
- Unless space is not reserved then shipping cannot be commence.
- The longer the fish remains in the custody of the company thousand off dollars are being lost.
- Company must fulfill its shipping obligations to its buyers.
- In some instances fisheries officer make random check on fish before shipment is being commenced.
- Company target is to ship out over 800,000 pounds of fish per year.
- Fish is transported to the airport via insulated refrigerated trucks.
- Fish is flown from Grenada to North America.



## BUSINESS RELATIONS

- Company signs "MOU" with fishermen/boat owners.
- Company holds individual meetings with boat owners on a regular basis.
- Company is very close and friendly with the fishermen.
- Company watch word to fishermen is "HONESTY."
- Company discuss "Price Structure" with fishermen.
- Company advise fishermen regarding their finances.
- Company advise fishers when they cannot buy fish.
- Company support fishermen birthday celebrations.
- Company gives a yearly bonus to fishermen.

## PROVISION OF SERVICE

### COMPANY PROVIDES A WIDE RANGE OF SERVICES TO FISHERMEN:

#### Landing Jetty:

- The landing jetty was built by the Japanese, and was assigned to the company by the government.
- The jetty is presently used by two exporters.
- The jetty is also used by the community.
- The jetty is wide enough to facilitate a fork lift and a small motor vehicle.
- The jetty is a major component of the lease from the government.
- The jetty is seen as part of the company.
- Company do not show hostility to the community in the usage of the jetty.
- Fishermen off load their catch from the jetty.
- The jetty is the main avenue for the delivery of fuel and ice to fishermen.
- The jetty is designate as a safe landing site under the HACCP protocols.

## CONFLICTS

### MAJOR CONFLICTS REGARDING THE USE OF THE JETTY:

- Stakeholder refuses to contribute for the maintenance of the jetty.
- Five ton heavy duty vehicle receives and delivers fish and ice on the jetty.
- Children are allowed to roam freely on the jetty.
- Dogs defecate on the jetty.
- The structural integrity of the jetty is questionable.
- Stake holder fuel line is not properly secure on the jetty.
- Recreational fishers leave fish remains and blood on the jetty.
- Texaco sets up a fuel line that runs out at the jetty.
- This is a cause for concern because the standards are not internationally acceptable.

## OTHER SERVICES

- ICE:
- The ice machine produces 12 metric tons of ice.
- Ice is removed and store in insulated bin.
- Ice is transported via forklift to fishermen vessels.
- Ice is sold at Ec.20 cents per pound to fishermen.
- An ice blower from the company will have the ability to blow ice directly to the ice hold of the fishermen vessels.
- Ice is credited to fishermen.
- Ice is also sold to the community.
- Ice is credited to the government fish markets when they are in shortage.

## WATER

- Company sells portable water to the fishermen at a reasonable price.
- National Water And Sewage Authority (NAWASA) provides water to the company on a consistent basis.
- Company has two large holding tanks, about 25,000 gallons each.
- Random testing is done from time to time.
- Company pays water rate of EC\$7,500.00

## FUEL

- Company is in the process to supply fuel to the fishing vessels.
- Company use diesel fuel for its internal use.
- Company sets up three fuel tanks.
- Each tank has a monitoring probe.
- 13,000 gallons of fuel is the maximum amount for the three tanks.
- One fuel tank will serve the fishing vessels.
- The other two tanks will serve the vehicles and the ice machines.
- Company has three generators in case of emergency.
- Company pays electricity bill of EC\$28,000.00.

## MATERIALS

- Company operates an outlet fishing retail shop.
- Company have in stocks all the gears and accessories needed for the long line fleet.
- All other fishing equipment are stored for the same purpose.



## MACHINE WORKSHOP

- Experience staff managed this workshop.
- All mechanicals installations and fittings for the company are done by workshop staff.
- Fishermen source parts for their engines at the company retail shop.
- Engines are repaired and service at the work shop.



## QUALITY ASSURANCE

- The HACCP plan was developed by officers of the Fisheries Division.
- The company adhere to this plan and all its guiding principles.
- The company follows the protocols of the (SSOP) on a daily basis.
- Heavy metal testing on the company fish is conducted in the USA.
- Water is tested by the Produce Chemist Laboratory. A fee of EC\$100.00 is paid for such test.

## EXPORT PERMISSION

- Licence for export is issued by the Fisheries Division.
- The establishment is constructed and operated in a manner that satisfies the licence requirements.
- The establishment is maintained and operates in a clean and sanitary manner.
- All records regarding operations are maintained and displays accuracy.
- Company records are open to inspection by any authorized officer.
- The company meets the above requirements, and as such a licence was issued to the company granting export permission.

- Company used swabs to conduct Histamine checks.
- Company promotes “Quality Assurance” in all its business undertakings.
- Company maintain standards in all aspects of quality assurance, and they try not to deviate from these standards.

## MARKETING IN THE USA

- Spice Isle Fish House exports all fish to the United States.
- Market relations with buyers were established since 1996.
- Yellow fin tuna is the main specie exported to the United States.
- From 2003-2010 a total of 5,312,262.40 lbs of (YFT) was exported to the USA, valued at EC\$. 55,636,913.75. Almost EC\$. 7,000,000 per year.
- From Jan 2011-Sept 2011 (SIFH) exported 411,344.00 lbs of (YFT) valued at EC\$4,730,804.12
- USA pays best for yellow fin tuna (Buyers pays \$US. 6.00) (5.00)(3.00) depending on the market

- The US market is closest and is a very lucrative market.
- Company export the best quality fish and company is rated high among the rest of the world.
- The sushi market is growing in the US and yellow fin tuna is in great demand.
- The demand for the yellow fin tuna is greater than what the company can supply.
- Company maintains “TRUST” and “RESPECT” with its overseas buyers.
- Company receives payments for fish in a timely and satisfactorily manner.
- There was no recalls since company start exporting fish the US market.

## Maintenance of facility

- Facility is being maintained by all sales proceeds.
- Company needs to make EC\$500,000.00 per year to maintain company properly.
- One time company experience overheads of EC\$170,000.00 per month.
- Company fish went via another route, was delayed and company lost EC\$ 200,000.00.
- Company is safe with their fixed assets and replace old parts as soon as depreciation sets in.

## COLLECTION OF SALES PROCEEDS

- Apart from exporting yellow fin tuna, (SIFH) generates sales from other avenues.
- They are:
  - Sales of ice.
  - Sales of water.
  - Sales of lobsters, shrimps, conch.
  - Sales of engine spare parts.
  - Sales of fishing gears and accessories.
  - Sales of by catch (Outlet retail shop).
  - Collect revenues for services and repairs to engines.
  - All sales proceeds is used for the payment of staff, Government taxes, and maintenance of the facility.
  - Company realize a gross profit of EC\$70,000.00 each month from such sales.

## RELATIONSHIP WITH GOVERNMENT

- Company receives some assistance from Government in the form of Concessions.
- Every year company pays EC\$200,000.00 to Government in Cooperate tax.
- Company needs to have more influence in the Government decision making process where fisheries is concerned.
- Company speaks to Government on behalf of the fishermen.
- Company staff and Government officials has a very good working relationship.
- Company assist Government institutions in times of need. (credit of ice-donations of fish-trophies for outstanding persons in the fishing industry).

## THANK YOU!

ANY QUESTIONS?

# APPENDIIX 3: Status of Antigua and Barbuda's Fishery Export Regime regarding the European Union in 2011

## Status of Antigua and Barbuda's Fishery Export Regime regarding the European Union in 2011

Prepared by: Ian Horsford (Sr. Fisheries Officer / Food Safety Specialist)  
Fisheries Division, Antigua and Barbuda  
for  
JICA-CRFM Workshop: Promoting the Development of Good Practices for Quality Assurance and Marketing of Fish and Fish Products  
15-17 February 2012  
Fisheries Division Conference Room  
Kingstown, St. Vincent and the Grenadines

## Structure of the Fisheries Sector

- ^ The fisheries sector of Antigua and Barbuda is small scale in nature.
- ^ In 2010, there were 944 active fishers, which is about 2% of the national labour force; For Barbuda, 1 in every 4 persons are directly dependent on fishing.
- ^ Sector acts as an economic "safety net" for other activities (e.g., tourism and construction).
- ^ Typical investment in fishing operations (e.g., vessel, gear and equipment) range from ECS\$45,000 to ECS\$210,000.



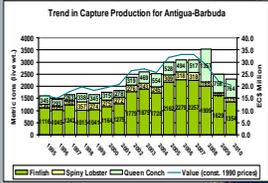
## Structure of the Fisheries Sector

- ^ Fish landing sites range from rural beaches (with limited or no infrastructure) to fisheries complexes (with potable water, ice-making and chill storage facilities).
- ^ The high-energy cost and inadequate access to capital limits the development of the fish processing sector.

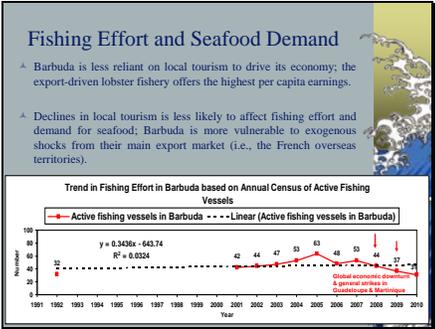
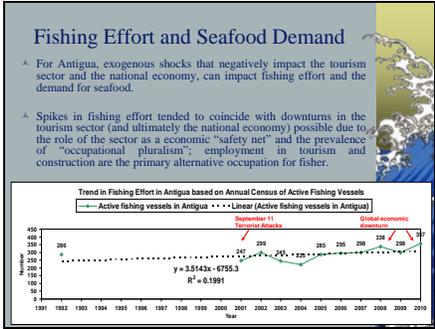


## Structure of the Fisheries Sector – Production

- ^ In 2010, capture production was 2,293 metric tons or 5,055 Million lbs and valued at ECS\$34.7 Million (based on current prices).
- ^ Fisheries sector on average contributes to 50% of the agricultural GDP or 2% of the national GDP (in current prices).



Year	Fresh Fish (Metric Tons)	Spiny Lobster (Metric Tons)	Queen Conch (Metric Tons)	Value (base: 1990 prices) (Million ECS)
2000	1000	500	200	10.0
2001	1100	550	220	11.0
2002	1200	600	240	12.0
2003	1300	650	260	13.0
2004	1400	700	280	14.0
2005	1500	750	300	15.0
2006	1600	800	320	16.0
2007	1700	850	340	17.0
2008	1800	900	360	18.0
2009	1900	950	380	19.0
2010	2000	1000	400	20.0

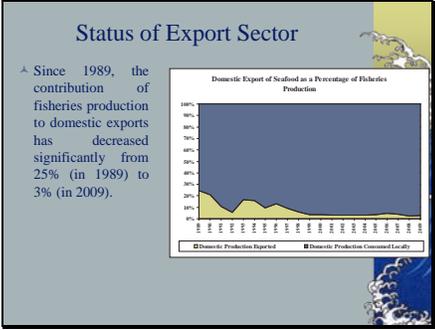
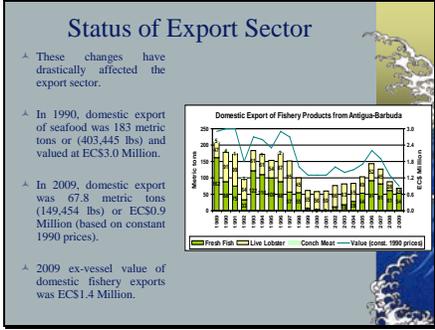


### Status of Export Sector

- For decades, the French territories in the region have been the main export market due to their close proximity and favourable prices.
- High retail value for seafood due to relatively high cost of production has limited the viability of alternative markets such as the USA and Canada – comparable prices can be obtained from the local tourism sector.
- With the formation of the single European market in January 1993, legislation governing the production of food were harmonised throughout the European Community.

### Status of Export Sector

- The key to European Food Law is the principle of quality management and process-oriented control throughout the production chain – from fishing vessels to the consumer's table.
- The stringent technical standards, the need for accompanying legislation and infrastructure make the process an arduous task for most developing countries.



### Present Status of Export Sector

- Antigua and Barbuda presently has "provisional approval" from the European Commission to allow for export of live lobster; originally fresh fish was also included in the Commission Decision.
- Grenada is the only other independent OECS Member State eligible to export fishery products to the European Community (within CARICOM: Bahamas, Belize, Guyana, Jamaica and Suriname in addition).
- Maintenance of approval for Antigua and Barbuda however, depends on addressing the concerns raised by the Food and Veterinary Office of the European Commission, following an inspection in November 2002.

### Present Status of Export Sector

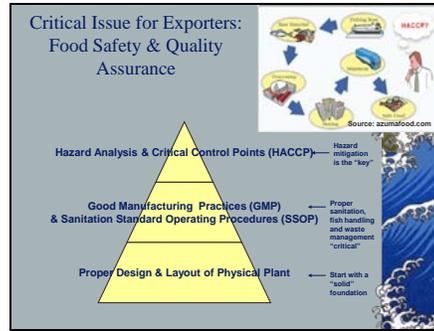
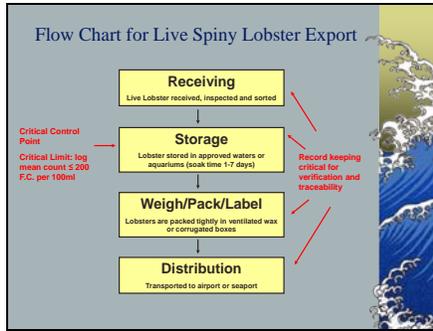
Recommendations made by the inspectors included:

- update of the fisheries legislation to meet the European legal provisions;
- accreditation of the national laboratory;
- refurbishing of deficient landing sites;
- development of systems to monitor and test seafood for environmental contaminants including ciguatera or "fish poisoning" toxins;
- assessment and implementation of HACCP (Hazard Analysis Critical Control Point) system in fish processing establishments. HACCP is a "preventative-based" food safety system.

### Ciguatera Fish Poisoning (CFP)

CFP results from the ingestion of certain tropical marine fishes that are contaminated by toxins produced by marine algae known as dinoflagellates; Antigua and Barbuda has a high number of cases.

Country	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total	
Antigua	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Antigua and Barbuda	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Bahamas	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Belize	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Bolivia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Burkina Faso	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Burundi	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Cameroon	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Canada	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Chad	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
China	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Colombia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Cote d'Ivoire	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Cuba	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Dominican Republic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Egypt	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
El Salvador	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Ethiopia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
France	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Germany	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Ghana	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Guatemala	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Honduras	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
India	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Indonesia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Italy	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Jamaica	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Jordan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Kazakhstan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Kenya	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Korea	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Madagascar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Malawi	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Malaysia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Maldives	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Mali	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Mexico	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Moldova	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Morocco	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Mozambique	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Nicaragua	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Niger	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Nigeria	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
North Macedonia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Oman	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Pakistan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Panama	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Paraguay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Peru	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Philippines	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Poland	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Portugal	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Romania	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Russia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Rwanda	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Saudi Arabia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Senegal	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Seychelles	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Sierra Leone	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Singapore	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Slovakia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22
Slovenia	1	1																							



- ### Role of the Competent Authority (CA)
- ▲ In addition to having the following:
    - ⊙ Adequate infrastructure (in regards to landing, processing and distribution);
    - ⊙ Sanitation Standard Operating Procedures;
    - ⊙ Food Safety and Quality Assurance Systems (HACCP, GMP, etc); and
    - ⊙ Trained personnel (at a minimum basic food handling)
  - ▲ The role of the CA is **paramount**.
  - ▲ The CA is responsible for **verifying** that any product exported from third countries (countries outside the EU) is in compliance with EU Food Law.

- ### Role of the Competent Authority (CA)
- the undersigned, recalls that 1 year before the relevant provisions of Regulation (EC) No 1762/2004, (EC) No 853/2004, (EC) No 853/2004 and (EC) No 854/2004 and certifies that the fishery products described above were produced in accordance with those requirements, in particular that they:
- come from (an) establishment(s) implementing a programme based on the HACCP principles in accordance with Regulation (EC) No 853/2004;
  - have been caught and handled on board vessels, landed, handled and where appropriate prepared, processed, frozen and stored hygienically in compliance with the requirements laid down in Section VIII, Chapters I to IV of Annex II to Regulation (EC) No 853/2004;
  - satisfy the health standards laid down in Section VIII, Chapter V of Annex III to Regulation (EC) No 853/2004 and the criteria laid down in Regulation (EC) No 2073/2005 on microbiological criteria for foodstuffs;
  - have been packaged, stored and transported in compliance with Section VIII, Chapters VI to VIII of Annex III to Regulation (EC) No 853/2004;
  - have been marked in accordance with Section I of Annex I to Regulation (EC) No 853/2004
  - the guarantees covering live animals and products thereof, if from aquaculture origin, provided by the residue plans submitted in accordance with Directive 862/EEC, and in particular Article 29 thereof, are fulfilled
  - and
  - have satisfactorily undergone the official controls laid down in Annex III to Regulation (EC) No 854/2004.

- ### The CA should be “Competent” (Reg. 882/2004)
- ▲ The Food and Veterinary Office of the European Commission assess this:
    - ⊙ By inspecting the **qualification** and **experience** of the inspection staff.
    - ⊙ By auditing the **operations** of the CA (inspection records, laboratory results, procedures, contingency plans, etc).
    - ⊙ By checking for **conflict of interest** and **authority** to enforce legislation.
  - ▲ For Antigua-Barbuda, inspection staff has acquired training from various source (CFTDI, FAO, NMFS, GFTC, NRA, etc) and cover various areas / levels (ServSafe Food Handler, HACCP Verification, ISO 9000 Internal Auditor, etc).
  - ▲ It is important to **update training** and maintain **professional certification**; membership in professional societies can be useful (e.g., International Association of Fish Inspectors).



## Other Issues

<sup>A</sup> Need to develop national seafood standards; not only relevant to the general consumer but also the tourism sector (cost and negative impact associated with litigation).

<sup>A</sup> The General Assembly of the World Tourism Organization has adapted resolutions on health protection for consumers of travel services.

<sup>A</sup> For additional info such as the manual for lobster exporters visit the publication section of Fisheries Division website:  
[www.fisheries.gov.gg](http://www.fisheries.gov.gg)

The fish handling manual will be posted shortly.

Thank You!



## APPENDIX 4: St. Lucia Fish Marketing Corporation Limited, Frozen Fish and Product Development



### Brief History

- The St. Lucia Fish Marketing Corporation Limited (SLFMC), has been in existence for the past 27 years.
- It is a body corporate, registered on October 24<sup>th</sup> 1984.
- SLFMC was initially funded by the Canadian International Development Agency (CIDA) and later the Japanese Government.
- The latter funded the opening of the Vieux-Fort plant in 2001.

### Brief History

- This plant primarily facilitates the processing and storage of all purchased fish and has a storage capacity of 250 tons or 560, 000 lbs.
- The primary objective of SLFMC is to "organise, promote and develop the St. Lucia Fishing Industry and to do so in the interest of St. Lucian Fishermen

### SLFMC in Pictures

Castries Branch      Retail Coolers

The image shows two photographs. The left photograph shows the exterior of the Castries Branch, a building with a sign that reads 'St. Lucia Fish Marketing Corporation Limited'. The right photograph shows the interior of the Retail Coolers, a long counter with a person standing behind it.



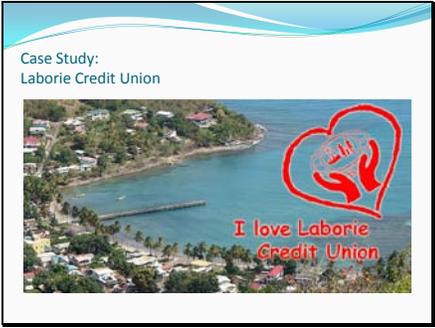
**Net Storage (LBS)**

Species	January	February	March	April	May	June	July	August	September	October	November	December
Strip Jack	101,140.00	105,854.00	108,512.00	120,091.00	113,348.70	102,020.70	91,521.00	76,326.70	71,968.30	59,172.20	47,280.00	28,809.00
Tuna	20203.2	30103.4	42,805.40	62,426.40	69229.4	75152.6	69697.6	56506.1	46994	33,390	17,579	6200
Kingfish	50558.8	61,998.20	117,827.00	128,984.70	145,808.70	145,589.70	132,899.70	112,549.00	104,702.00	91,383.00	72,863.00	24,238.00
Orange	10791.6	27,718.40	113,801.40	140,821.40	126,418.40	126,421.40	92,215.40	70,532.40	60,128.40	26,389.00	8,324.00	0.00
Shark	7493.3	6,873.30	7,126.30	6,345.30	4,678.30	4,678.30	5,579.30	4,838.30	4,838.30	5,914.00	5,028.00	6,104.00
Large Tuna	3436.6	3,586.60	9,239.00	11,078.00	11,078.00	11,078.00	9,470.40	9,568.00	10,893.00	10,392.00	11,965.00	3,392.00
Red Snapper	13061.7	11,528.00	8,885.00	7,294.20	7,291.70	7,289.60	3,120.70	0.00	0.00	0.00	0.00	0.00
Mullet	9512	12,207	21,169.00	21,169.00	23,726.00	23,726.00	25,000.00	21,710.00	0.00	0.00	0.00	4,844.00
*Math-Loss									20,398.00	10,268.00	21,300.00	10,406.10
<b>TOTAL MONTHLY</b>	<b>227,582.00</b>	<b>226,914.30</b>	<b>428,465.30</b>	<b>588,268.30</b>	<b>498,865.70</b>	<b>487,251.80</b>	<b>428,576.30</b>	<b>363,774.10</b>	<b>319,923.60</b>	<b>246,167.60</b>	<b>182,126.90</b>	<b>88,162.70</b>



- ## RELATIONSHIP WITH FISHERMEN
- Selection Methods:
    - No specific requirements for fishermen
  - Purchasing requirements:
    - all fish must be gutted except snappers. Fish are inspected by the purchasing officer
  - Support Services
    - fishermen are given ice to preserve their baits, and ice on holidays when the facilities are closed
  - Relation with vendors

- ## Problems with Fishermen/Vendors
- Fishing Methods
  - Competition from Suppliers
  - Dumping of Undesirables
  - Guaranteed price System
  - Payment Plans with fishermen



- ## RELATIONSHIP WITH FISHERIES DEPARTMENT
- Technical Support
  - Policy decisions

- ## MARKETING
- How to select and establish relationship with customers:
    - Selection is done through Market Segmentation:
      - Identification by age, lifestyle, size, needs and location.
      - Categorization in various segments
- For example: pairing healthy living with fish consumption
- Exports : SLFMC has FDA approval and export fresh snappers for the "catch of the day" markets in North America
- Recent developments have centred on relatively close markets with less stringent regulations such as within CARICOM

## Niche Markets

- School Canteens
- Business Canteens
- Domestic Households
- Small Restaurants/Fast Food Businesses
- Fish Fry Vendors
- \*Walk in Customer or First Time Buyer
- Unions (e.g. Nurses)

## Relationship with Customers

- Established upon identification of needs and category.

### How?:

- Special Discounts offered within the year (eg. Easter, Christmas)
- Free Delivery Service
- Sample-Tastings on site
- Custom orders
- Credit facilities

## MARKETING

- **Difficulties experienced**
  - Lack of Funding for effective promotion and advertising
  - Notion that Frozen Fish is Bad Fish
  - Imports
  - Lack of Technology (e.g. Filleting Machine)
- **Addressing difficulties:**
  - Adverts are done via television, radio and print media on a limited basis, educational programs

## Addressing Difficulties

- Customer survey was only carried out once last year and cannot be done extensively due to insufficient staff.
- Certain customers within the market are left unsatisfied due to the lack of technology/machinery.
- Difficult to change the notion that frozen/iced fish is bad fish

## INVENTORY MANAGEMENT

- Recording Stock Levels
- Deciding purchasing/selling time and volume
- Difficulties
  - loses in weights through dehydration are not computed properly
  - separation of inventory data from accounting data
  - Accounting information is not up to date

## QUALITY ASSURANCE

- Are there any regulations/standards
  - Minimum weights for fish purchases:
    - \*Tuna: no less than 4 lbs
    - \*Dorado: No less than 7 lbs
    - \*Kingfish: no Less than 4 lbs
- All fish must be gutted with the exception of Snappers

## QUALITY ASSURANCE

- After initial processing fish are kept in a blast freezer for 12 hours at minus 35 degrees
- Storage freezers are kept at minus 10 degrees
- Difficulties:
  - Poor practices by the fishermen
  - Lack of trained and competent employees in quality assurance
  - Facilities

## FACILITY MANAGEMENT

- Daily maintenance
- Repair / changing of spear parts
- Plan for replacement of new machine
- Plan for renovation of the facilities
  - Moving towards HACCP Certification

## FINANCIAL MANAGEMENT

- Cost cutting efforts
  - Shutting down of main Freezers when stocks are low
- Profit making effort
  - Very difficult as the Corporation serves the roles of social/political motives as well as profit making motive

## PRODUCT DEVELOPMENT

- Sustainable Seafood Festival: PwesonNou
  - First Annual event held August 1, 2011
  - Local fish (low sales) were used to prepare original recipes for sample tasting for the public
  - SLFMC housed a Local Dish booth and a Japanese Style booth
  - Event resulted in increased sales for the month of August 2011.

## Pweson Nou Festival



## Caribbean health and wellness campaign



Caribbean Health and wellness Campaign

**Before the Fish Presentation**                      **After the Fish Presentation**



**PRODUCT DEVELOPMENT**

- **Trial Marketing – New Product Development**
  - Production of Fish Fingers/Burgers/Croquettes
  - Phase 1: Commercial Testing

**Scheduled for January 2012:**

- Commencement of Production
- Cost Analysis and Price Determination
- Advertisement
- Official Product Launch

## APPENDIX 5: Photographic Intro to Japan's FAC

Photographic Introduction to Fisheries Cooperative Associations (FCAs)



This is "Kurobe Fisheries Cooperative Association (Kurobe FCA)" in Toyama Prefecture, on the western part of Japan facing the Sea of Japan. The letter on the left says: "We would like to express our heart-felt sympathy to the sufferers of the Great East Japan Earthquake and Tsunami."

A bit of information concerning the Great East Japan Earthquake and Tsunami of 11 March, 2011

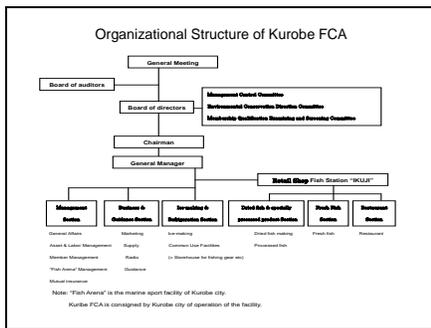
- Supplementary information: a total of 21,000 fishing vessels were either lost or completely damaged so that they are no more usable and must be scrapped.
- Out of the total number of 1,3163 persons (who either died or missing), 765 are FCA member fishers. This is 4 % of casualties are FCA member fishers. (765/19,163 = 4 %). Further, 24 FCA staff (employees) perished. (Data from the National Policy Agency as of 7 February.)
- Still today, more than 341,000 persons are obliged to live in emergency evacuation facilities. (Data from the Cabinet office of the Government as of 26 January, 2012)
- It is further noted that in addition to this, more than 150,000 persons are still today obliged to live in evacuation centers etc (80,000 within Fukushima Prefecture, and 60,000 outside of Fukushima Prefecture) affected by Tokyo Electric Company's Nuclear Power Plant in Fukushima Prefecture, central eastern part of Japan facing the Pacific Ocean.
- Thus, altogether, 1 bit less than half a million people (491,000 people) still today as of the end of January, 2012 are living an unusual life.
- JF ZENGYOREN started "Genbare Gyoogyo Bokin (Save Fishers Fund)" Campaign, and a total of money donated exceeded its target amount of 1 billion Yen; more than 2.1 billion Yen (about 21415,000 US\$) were collected. This was already distributed to the suffered Prefectures by the end of January, 2012, and still now the donation campaign is being continued.

Where is Toyama Prefecture?



Kurobe FCA

Address: 365 Nuj Naku, Kurobe-Sghi, Toyama Pref., Japan Postal code: 938-0072  
 Tel: +81 (0) 765 57-0151 Fax: +81 (0) 765 57-0151  
 Homepage: <http://www.f.kurobe.jp/gyojyokai/kyo.htm>  
 Representative: Mr. Tsutomu Matsuro, Chairman  
 No. of members: 448 (Regular members: 79)  
 Amount of share capital: 41,120,000 Yen  
 (= on average, 91,455 Yen (= 1,220 US\$) per member)  
 (Data as of 11 March, 2011)  
 Business: Marketing, Supply, Ice-making & supply, Fish processing, Operation of a restaurant, Radio station, Fisheries business consultation, Common use facilities service, Fisheries resource management, Guidance activities, Mutual insurance



Marketing Business

Inspection of fish by buyers before auction



The Wholesale Fish Market of Kurobe FCA is a Regional Wholesale Market based upon the Wholesale Market Law; the total area of the Market is more than 220 square meters.

### Marketing Business

Auction taking place

### Facilities

"Fish Arena"

One of the Common Use facilities  
dry dock for repair of fishing vessels

### Retail Shop Fish Station "IKUJI"

Fresh fish corner

<http://www.jf-kurobe.jp/>

### Retail Shop Fish Station "IKUJI"

Fresh fish corner

### Retail Shop Fish Station "IKUJI"

Salted and dried fish corner (including half dried fish)

### Retail Shop Fish Station "IKUJI"

Processed fish corner

## Fish Processing

Only local catch is processed. Thus, fish species which are processed changes according to the season.



## Kurobe FCA Wholesale Fish Market Open Day in 2012



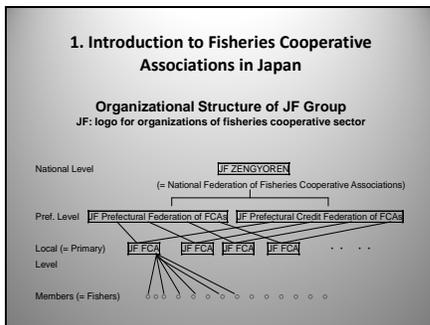
# APPENDIX 6: Major Businesses (Credit, Marketing and Supply) of Fisheries Cooperative Associations in Japan

**Major Businesses (Credit, Marketing and Supply)  
of  
Fisheries Cooperative Associations in Japan**

by Masaaki Sato  
Former Director of International Affairs Department  
National Federation of Fisheries Cooperative Associations (JF ZENGYOREN), Tokyo and  
former Secretary of International Cooperative Fisheries Organization of the International Cooperative Alliance

Main Contents of presentation

1. Introduction to Fisheries Cooperative Associations of Japan
  - including
  - Organizational Structure of JF Group
  - Membership qualification
  - Statistics of Fisheries Cooperative Associations
2. Credit Business
  - including
  - Linking with Marketing Business
  - Protection System
  - Government Subsidized Loans
3. Marketing Business
  - including
  - Wholesale Fish Market in Production areas
  - Marketing method
  - How to realize appropriate marketing price of fish in landing areas
  - How to cope with risks in collection of residuals
4. Supply Business
5. Some of the issues which need be heeded and necessary when transferring Japan's FCA system to developing countries
  - including
  - [Extracted from FAO's paper](#) on "Factors for Success or Failure of Fishermen's Organizations"



**1. Introduction to Fisheries Cooperative Associations in Japan**  
**Membership qualification**

- Regular member and associate member
  - Regular member: voting right and eligibility
  - Associate member: no voting right and no eligibility but allowed to use the services of fisheries cooperative associations (FCAs)
- Requirements in the case of regular member
  - Address
  - No. of days engaged in fisheries: 90-120 days as determined by the FCA
  - Total gross tonnage of fishing vessels used: individual fishers and juridical person
  - In the case of juridical person
  - Number of employees: less than 300
  - Total gross tonnage of fishing vessels used: less than in-between 1,500 and 3,000 GRT as determined by the FCA
- Nobody (Individuals and juridical persons) is qualified to become a member of FCA if the total GRT of fishing vessels he has is more than 3,000 GRT.

1. Introduction to Fisheries Cooperative Associations in Japan

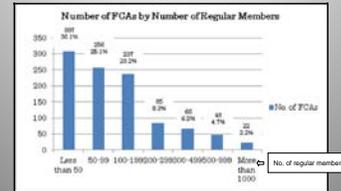
Comparison in number of members between agricultural cooperative associations and fisheries cooperative associations

	Total in Japan	Average number per FCA
Fisheries Cooperative Associations (Data: JFY 2009)		
Regular member	191,696	197.8 (= about 188)
Associate member	170,523	167.0
Total	362,219	364.8 (= about 355) ... A
Agriculture Cooperative Associations (Data: JFY 2010)		
Regular member	4,729,628	6,615
Associate member	4,796,330	6,708
Total	9,525,958	13,323 ... B
		B/A = 37.5

Source: Prepared from FCA statistics of JFY 2009, Fishery Agency, MAFF, October, 2011 and from the statistics of agricultural cooperative associations in JFY 2010 by JA ZENNGU (Central Cooperative Union of Agricultural Cooperatives)

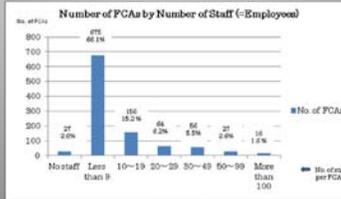
1. Introduction to Fisheries Cooperative Associations in Japan

Number of FCAs by Number of Regular Members



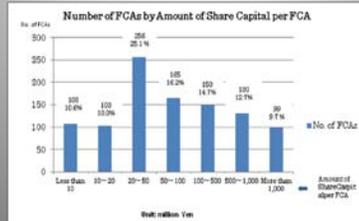
1. Introduction to Fisheries Cooperative Associations in Japan

Number of FCAs by Number of Staff (= Employees)



1. Introduction to Fisheries Cooperative Associations in Japan

Number of FCAs by Amount of Share Capital per FCA



1. Introduction to Fisheries Cooperative Associations in Japan

Decrease in number of FCAs and fishers, and continuing deficit in about 30 % of FCAs

	2009	2001	1991
No. of FCAs	1,026	1,710	2,103
Regular member fishers (bona fide fishers)	167,427	236,225	293,237

Number of FCAs in the current term, profit/loss for fiscal year (2009:2009)

Fiscal year	FCAs with revenues in surplus		FCAs with revenues in deficit		Total No. of FCAs	Total No. of FCAs in surplus (%)
	Number of FCAs	%	Number of FCAs	%		
1991	1,426	67.8	677	32.2	2,103	67.8
2001	1,426	83.4	284	16.6	1,710	83.4
2009	427	41.6	599	58.4	1,026	41.6
2009	427	41.6	599	58.4	1,026	41.6
2009	427	41.6	599	58.4	1,026	41.6
2009	427	41.6	599	58.4	1,026	41.6
2009	427	41.6	599	58.4	1,026	41.6
2009	427	41.6	599	58.4	1,026	41.6

Note: Top figures: Result of business as revealed from current term profit and/or loss. Bottom figures: Result of business when carry-over profit or carry-over deficit from the previous term is accounted for.

1. Introduction to Fisheries Cooperative Associations in Japan

Promotion of amalgamation

- Under the poor performance of management of FCAs, amalgamation was promoted. Although the target figure of 250 FCAs by the end of JFY 2007 was not achieved, efforts are being continued. As of 1 February, 2012, the total number of FCAs in Japan is 998.
- The situation in agricultural cooperative sector is similar: their target figure of amalgamation was 428 by the end of March, 2011, but they also failed to realize the target. The number of agricultural coops as of the end of March, 2011 was 715.

### 1. Introduction to Fisheries Cooperative Associations in Japan

#### Characteristics of FCAs in Japan

(1) Cooperative principles – a working guideline –

- FCAs are operated by complying with ICA's statement on the cooperative identity of 1995. This statement includes the following 7 principles:
- Cooperative Principles
  - 1) Voluntary and Open Membership
  - 2) Democratic Member Control (such as one member, one vote)
  - 3) Member Economic Participation
  - 4) Autonomy and Independence
  - 5) Education, Training and Information
  - 6) Cooperation among Cooperatives
  - 7) Concerns for Community
- These principles are guidelines by which cooperatives put their values into practice.
- Note:
  - ICA: International Cooperative Alliance (Home page: [www.ica.coop](http://www.ica.coop))

### 1. Introduction to Fisheries Cooperative Associations in Japan

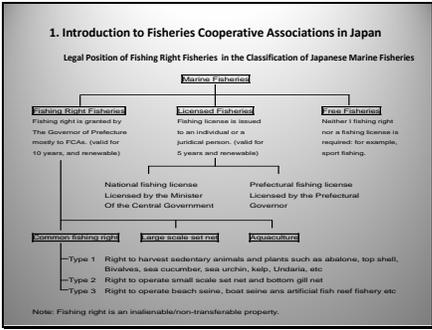
#### Characteristic of FCAs in Japan

(2) Fishing right

Under the Fisheries Law, fisheries are classified into three categories for management purposes:

- Fishing right fisheries;
- Licensed fisheries; and
- Free fisheries.

Fishing right is the basis for operation of coastal fisheries. The fishing right is granted from Prefectural governor to the FCAs.



### 1. Introduction to Fisheries Cooperative Associations in Japan

#### Characteristics of FCAs in Japan

(3) Multi-purpose

Number of FCA by Business in 2009

Business operated by FCA	Number of FCAs engaged in	% of FCAs engaged in
Catch	200	25
Insurance (life & property)	211	26
Storage	608	76
Marketing	608	76
Processing	521	65
Freezing & Cold storage	321	40
FCAs own business	154	19
Of which:		
- Real estate business	91	11
- Finance business	27	3
- Agriculture	75	9
- Other types of business	61	7
Specialized business	100	12
Specialized business	100	12
Fish processing	159	19
Storage of fish and related products	97	12
Radio-communication	33	4
Electricity and gas	23	3
Construction	1,014	127
Others	1,014	127
Total	804	100

Source: Prepared from "Statistics of FCAs", October, 2011, Fishery Agency, Ministry of Agriculture, Forestry and Fisheries (MAFF), Government of Japan

### 1. Introduction to Fisheries Cooperative Associations in Japan

#### Statistical Data of FCAs

Table 1 Organizational aspect

	Unit: No. of person						Completion rate (%)
	2003	2004	2005	2006	2007	2008	
No. of FCAs	1,405	1,337	1,302	1,356	1,073	92	
No. of members	421,110	394,081	390,790	397,212	270,213	83	
Regular members	246,541	234,542	231,513	221,763	208,023	83	
Associate members	174,570	159,539	159,277	175,450	162,190	93	
No. of officers	14,841	14,144	11,813	9,725	10,422	67	
Directors	11,020	10,489	8,762	7,242	7,734	67	
Full-time	779	777	660	562	582	75	
Part-time	10,241	9,712	8,102	6,680	7,152	67	
Auditors	1,811	1,645	1,051	2,483	2,688	67	
No. of employees	14,877	14,150	13,212	12,087	12,938	87	
General Manager & Chief Executive	838	772	630	541	565	64	
General Staff	13,999	13,378	12,582	11,546	12,373	88	
Fixed-tenure			276	61			

### 1. Introduction to Fisheries Cooperative Associations in Japan

#### Statistical Data of FCAs

Table 2 Businesses -Total in Japan-

	Unit: Million Yen						Completion rate (%)
	2003	2004	2005	2006	2007	2008	
No. of FCAs which operated marine business	1,207	1,261	1,031	838	917	88	
Total amount of transaction	9,657	10,200	10,700	10,570	10,407	108	
Production	7,948	7,618	8,066	9,741	11,717	147	
Marine aquaculture	36,204	37,865	42,791	52,346	42,313	103	
Other fishery	36,880	41,349	44,095	45,477	55,348	145	
Real estate/other business	2,205						
Fish processing	180.0	180.0	180.0	180.0	180.0	100	
Storage of fish and related products	12,046	11,661	11,430	10,639	11,449	94	
Radio-communication							
Electricity and gas							
Construction	1,200	1,177	942	805	809	68	
Others	1,082	1,010,019	1,017,245	1,017,841	1,018,948	100	
Production of other fishery products	15,645	16,200	17,514	17,433	18,216	117	
Other	24,14	19,077	19,043	17,716	17,611	87	
Construction	27,736	28,814	29,829	29,800	30,227	102	

**1. Introduction to Fisheries Cooperative Associations in Japan**  
Statistical Data of FCA s

**Table 3 Balance Sheet -Total in Japan-**

Unit: Million Yen

	2003	2004	2005	2006	2007	2008	Comparison (2008/2007)
Total assets	1,974,805	1,955,288	1,648,981	1,505,320	1,685,073	1,573,852	80 93
Credit business	1,388,177	1,294,051	1,028,241	1,025,944	1,208,079	1,208,231	78 84
Mutual insurance	7,853	8,042	7,751	7,053	7,348	208	4 4
Current assets	244,831	232,851	230,689	206,661	231,651	248,372	80 95
Fixed assets	345,355	311,437	311,707	269,217	206,963	216,272	86 95
Deferred assets	12,610	13,087	14,515	14,959	12,653	13,962	93 94
Debt business	8,887	8,784	15,653	4,722	2,248	6,509	77 97
Other	23,240	26,116	26,087	23,584	22,658	16,168	70 71
Total liabilities and equity	1,674,885	1,665,288	1,484,951	1,347,528	1,488,073	1,374,862	80 93
Total liability	1,494,448	1,455,051	1,339,053	1,242,447	1,426,773	1,297,535	76 92
Credit business	1,278,986	1,175,776	1,006,876	993,497	1,248,184	1,248,184	94 94
Mutual insurance	14,690	15,108	14,908	13,826	14,147	6,807	41 49
Current assets	194,545	183,689	178,497	160,003	165,000	164,031	84 99
Fixed assets	124,660	117,732	124,771	98,794	113,272	108,203	72 97
Other	70,044	70,516	62,304	48,131	48,170	43,909	91 92
Total capital	278,157	272,207	245,189	246,183	275,300	275,317	99 100
Investment	213,389	213,645	207,328	194,512	212,233	207,554	97 96
Reserve	64,768	58,562	37,861	51,671	63,067	67,763	107 107
Capital reserve	3,148	2,597	1,820	4,483	4,315	4,172	133 64
Profit	469	245	502	42,883	54,360	63,974	9,264 134
Total	-42,988	-42,627	-42,487	1,248	2,320	2,320	4 93

**1. Introduction to Fisheries Cooperative Associations in Japan**  
Statistical Data of FCA s

**Table 4 Profit and Loss by Business Division -Total in Japan-**

Unit: Million Yen

	2003	2004	2005	2006	2007	2008	Comparison (2008/2007)
Total income from business	109,774	105,849	94,748	84,948	114,247	114,800	104 97
Credit business	5,860	5,774	5,854	5,271	5,361	5,436	102 107
Mutual insurance	9,976	9,877	9,247	8,607	9,791	9,475	97 97
Supply business	70,210	69,794	62,620	54,881	72,021	72,021	100 100
Marketing business	13,210	13,148	13,120	13,111	14,747	14,747	100 100
Sea-fishing business	12,240	12,194	12,008	11,921	12,212	12,212	100 100
On-fishery business	1,247	1,212	1,240	1,241	1,241	1,241	100 100
Other	12,007	12,008	12,008	12,008	12,008	12,008	100 100
Business management expenses	102,613	102,843	94,818	84,948	114,247	114,800	104 97
( of which personnel expenses )	74,171	74,042	69,808	63,807	75,242	75,974	91 96
Profit from business	7,161	3,005	9,930	10,000	20,000	20,000	100 100
Income from non-business	84,176	80,075	75,313	67,171	84,176	84,176	100 100
Non-business expenses	84,176	80,075	75,313	67,171	84,176	84,176	100 100
Net profit	3,005	3,005	4,617	2,829	15,824	15,824	100 100
Current year profit	3,005	3,005	4,617	2,829	15,824	15,824	100 100
Reserve	0	0	0	0	0	0	0 0
Capital reserve	0	0	0	0	0	0	0 0
Profit	0	0	0	0	0	0	0 0
Income from non-business	84,176	80,075	75,313	67,171	84,176	84,176	100 100
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Capital reserve	0	0	0	0	0	0	0 0
Profit	0	0	0	0	0	0	0 0
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Capital reserve	0	0	0	0	0	0	0 0
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Capital reserve	0	0	0	0	0	0	0 0
Profit	0	0	0	0	0	0	0 0
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Capital reserve	0	0	0	0	0	0	0 0
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Capital reserve	0	0	0	0	0	0	0 0
Profit	0	0	0	0	0	0	0 0
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Non-business expenses	84,176	80,075	75,313	67,171	84,176	84,176	100 100
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Current year profit	3,005	3,005	4,617	2,829	15,824	15,824	100 100
Reserve	0	0	0	0	0	0	0 0
Capital reserve	0	0	0	0	0	0	0 0
Profit	0	0	0	0	0	0	0 0
Income from non-business	84,176	80,075	75,313	67,171	84,176	84,176	100 100
Non-business expenses	84,176	80,075	75,313	67,171	84,176	84,176	100 100
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Capital reserve	0	0	0	0	0	0	0 0
Profit	0	0	0	0	0	0	0 0
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Current year profit	3,005	3,005	4,617	2,829	15,824	15,824	100 100
Reserve	0	0	0	0	0		



## 2. Credit Business

Breakdown of Loans extended to fisheries sector in Japan 1980 - 2005

Unit: billion Yen and %

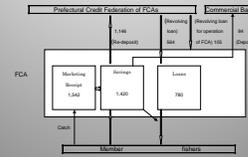
	1980	1990	2000	2005
Total outstanding balance of loans extended from all financial institutions	2,801.8	2,895.5	2,191.9	1,556.3
Of which from				
Government financial institutions	16.9 %	17.9 %	9.6 %	7.9 %
Fisheries Cooperative Sector	56.2 %	51.7 %	60.9 %	68.0 %
Commercial banks	26.9 %	30.4 %	29.3 %	24.1 %

The share of loans made by the government-subsidized loans has decreased and the loans from fisheries cooperative sector institutions have increased.

## 2. Credit Business

How FCAs secure money for keeping the business going  
Re-deposit and Re-loan Financing System in FCA sector

Fig. 1 The Re-deposit and Re-loan Financing System in FCA sector



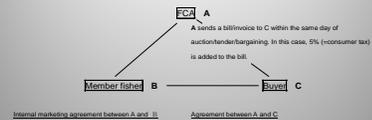
## 2. Credit Business

Merging of Credit Business Divisions

By 1 February, 2012, out of the total number of 36 Prefecture where there are Prefectural Credit Federation of FCAs, in 23 Prefectures, namely 64 % of the total, credit business divisions of FCAs have been merged after credit business division merging movement started in December, 1992.

## 2. Credit Business

(1) Linking with Marketing Business



**When to pay**  
**A** pays the money to **B**  days (for example 2 days) after the fish was sold, after deducting marketing commission and various receivables on the part of A such as fishing materials and fuel which A sold to B  
**When to pay**  
**C** pays the bill (including consumer tax) to A within  days (for example 7 days) after C receives the bill from A.

## 2. Credit Business

(2) Protection system

- JF Marine Bank Support Association
  - This is a former National FCA Credit Business Mutual Aid Fund of which name was changed to JF Marine Bank Support Association in 2002.
  - This fund is designed to help maintain sound management of credit business of FCAs. It is aimed at protecting FCAs from becoming bankrupt well beforehand, and to help improve performance of credit business of FCAs by securing reserve funds for payout of members' savings on contingencies and by supplying adequate amount of money for rehabilitation of FCA management in a smooth way.
  - The fund is secured by reserving 1/10,000 of average outstanding saving deposits for the initial 5 years and 0.4/10,000 thereafter.
  - As of the 31 March, 2011, the outstanding amount of the Fund was 25,517,512,808 Yen.

## 2. Credit Business

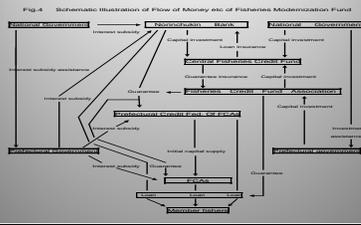
(2) Protection system

- Agriculture and Fisheries Cooperative Savings Insurance System
  - This is a system which is designed to, in case of bankruptcy or economic failure of a FCA, insure payment of money of member fishers within the limit of maximum 10 million Yen per member. The insurance premium is 1.2/10,000 of the amount of his (member fisher's) deposit. As of the 31 March, 2011, the total outstanding amount of liability reserve fund was 301,731,012,129 Yen.



## 2. Credit Business (3) Government-subsidized loans

Schematic illustration of Flow of Money etc of Fisheries Modernization Fund loan



## 3. Marketing Business

The marketing business is like the heart of human body: Coupled with the function of credit business (blood), it becomes the main source of generating income in most FCAs.

- About 80 % of FCAs in Japan are engaged in marketing business, and of this, 40 % are operating "Regional Wholesale Fish Market", and 60 % "Local Wholesale Fish Market".
- The share of FCAs in marketing business: 74 % of fisheries production in production areas
- 95 % of member fishers produce is marketed on consignment basis.
- The marketing business of FCA is operated in accordance with the Marketing Business Regulation.

## 3. Marketing Business

### Some of the important points

- In the model marketing regulation of FCA (see Annex 3)
- Method of marketing: unconditional consignment basis

- In the model business regulation of wholesale fish market of FCAs (see Annex 4)
- Approval of buyer: a buyer must have necessary knowledge, asset, and credibility.
  - Guaranty money of buyer: a buyer must deposit guaranty money to the wholesaler.
  - The wholesaler must not receive any award (bribe etc) other than marketing commission
  - The buyer has an obligation of immediate payment of invoice
  - Market Management Council (MMC): established by representatives of wholesaler, buyers, shippers, and consumers etc. Matters such as on management of the Market, rationalization of trade, smooth distribution of commodities, coordination of dispute, etc are discussed in order to ensure smooth management of the Market.
  - Separate from MMC, Market Trade Committee (MTC) should be established. The members of MTC are the representative of wholesaler, buyers, and persons concerned and persons of learning and experience. The duties of MTC are to express opinions concerning changes of business regulations of the Market in order to contribute to ensuring fair and efficient trade at the Market.
  - Punishment: in case buyers violate the regulation, in extreme cases, he may be prohibited access to the Market or even his approval as buyer may be revoked.

## 3. Marketing Business (1) Wholesale Market

Table 5 Licenses and/or approval concerning operators, market actors, and method of trade at RWVCLW in production areas

	Wholesale Fish Market in Production Area	Local Area Wholesale Market
Size of area of wholesale market	More than 200 square meters In case it includes wholesaling to consumer area wholesale market, fish processors etc. area less than 200 square meters	Less than 200 square meters
Operator	Local government, wholesaler, FCA (Approved by Prefecture government)	FCA (Approved by Prefecture government)
Wholesaler	Same as above	FCA
Buyers (buyers, Participants in trade)	Corporation, individual (Approved by the operator)	Corporation, individual, person (Approved by the FCA)
Method of trade	Trade auction (negotiating)	Trade auction (negotiating)

Note: As regards method of trade, each RWVCLWC sets out appropriate provisions in accordance with the recommendations from the Market Trade Committee.

## 3. Marketing Business (2) Marketing Method

Marketing of fish and fishery products by FCA is done by mainly the following two methods:

- ① Marketing on (unconditional) consignment basis auction, tender, bargaining

**Tender** In case the total quantity of fish (product), or "a lot" which is put on the market is not so much in terms of quantity, auction method is said to be advantageous to the wholesaler (who conducts auctioning on behalf of the fishers on consignment basis). On the contrary, if the quantity is so large that it is not possible for buyers to buy it all unless divided into appropriate number of smaller lots, tender method is said to be more advantageous to the wholesaler.

- ② Marketing by outright purchase

## 3. Marketing Business (2) Marketing Method

③ Bargaining is often adopted in the following cases:

- 1) in case certain quantity of a product is left unsold;
- 2) in case the price bid in the tender is lower than "Sashine"  
"Sashine" = minimum price a fisher requests his FCA (= wholesaler) below which he does not want to sell.

### 3. Marketing Method

(3) How to realize appropriate marketing price of fish in landing areas

- Necessity of equipping with statistical data and other information as correctly as possible such as on:
  - Demand and supply status
  - Market scale and market trend
  - Inventory
  - Domestic consumption
  - Export
 so that the wholesaler (FCA) can stand on equal footing as regards these information with buyers, by, for example, using information provided from Japan Fisheries Information Service Center (JFISC)
- By using Fish Price Stabilization Fund system in times of glut in case of certain designated pelagic species like sardine, mackerel etc.

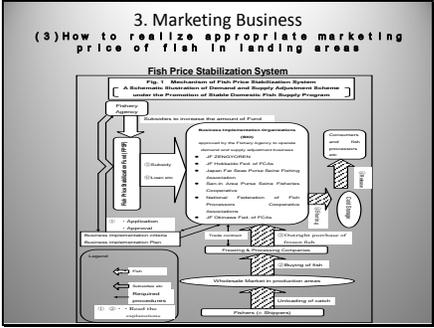
### 3. Marketing Business

Information provided from JFISC

Information regarding quantity and value of major species of fish landed (21 species as regards fresh fish and 11 species as regards frozen fish) are collected, compiled and reported to the Fishery Agency on a daily basis with cooperation from 30 markets in the production areas and 4 markets in consumption areas. The data are transmitted to fishing vessels on the sea and also distributed in the form of monthly and annual bulletins after compilation and analysis.

Target species for which JFISC is specially emphasizing in providing information to the members are as follows:

- Fresh fish:** Jack mackerel, mackerel, squid, Pacific saury, skipjack, Pacific cod, Alaska Pollock, herring, sand lance, sardine, flatfish, bigeye tuna, yellowfin tuna, yellowtail (white), yellowtail (colored), chum salmon, sockeye Alaska Pollock, red, blue mackerel, Spanish mackerel, red sea bream, tiger, olive flounder, abalone, pufferfish, albacore, chicken gizzard, coho salmon, prawn, blue crab
- Frozen fish:** Jack mackerel, mackerel, squid, Pacific saury, skipjack, bigeye tuna, yellowfin tuna, octopus, other tuna, salmon, salmon and trout fish eggs



### 3. Marketing Business

(3) How to realize appropriate marketing price of fish in landing areas

**Fish Price Stabilization System**

The following are the problems which the Business Implementation Organizations (BIOs) as well as those who are to be the beneficiaries of this Fish Price Stabilization System (namely, FCA member fishers) feel:

- The species covered by this system are not so many, and limited to only those which are caught in quantity or supplied in quantity.
- The Business Implementation Organizations (BIOs) must release the product, in principle, within 4 months after they purchased it.

You can not say for sure that the prices of the product items covered by this system in the production area market will become stabilized in a favorable way to producers. This means that FCA member fishers may have to "endure" the plight of continuing low prices of their catch; there is no guarantee that producer prices of the products in question will definitely recover.

### 3. Marketing Business

(3) How to realize appropriate marketing price of fish in landing areas

**Reference information: Withdrawal price system in EC countries**

Withdrawal price (The EC sets out this kind of matrix for a number of species.)

Quality	Species	Small (S)	Medium (M)	Large (L)
Low		6 euro/Kg	8 euro/Kg	10 euro/Kg
Medium		7 euro/Kg	9 euro/Kg	11 euro/Kg
High		8 euro/Kg	10 euro/Kg	12 euro/Kg

Note: The size and quality criteria are determined for a number of species by the EC. Designated inspectors routinely check these at the wholesale markets (landing areas) which the EC designated. In order for you to benefit from this system, you have to be a member of a Producer Organization (PO). In case the fish (in this case cod) of Size L, Quality H is sold at 10 euro, the difference of 2 euro is paid from the Common Fund established by the member countries of EC via the fisher's PO to him. In this sense, this system is a direct fish price compensation scheme. However, because of high popularity of fish on account of health benefit, the prices have been higher at the Market than these withdrawal prices. Accordingly, not much payment has been done for this purpose in the EC. Incidentally, the prices in the above table are an example just for giving you an image of the withdrawal price system.

### 3. Marketing Business

(4) How to cope with risks in collection of receivables

**Establishment of a company to collect receivables on behalf of FCA**  
The shareholders of this company are usually the FCA concerned and a buyers association.

At any FCAs where marketing business is engaged in, an agreement is entered into between the FCA and each buyer. The agreement sets out the following conditions:

- Time of Payment -- usually 4 or 5 days after the product is bought.
- Maximum amount of transaction allowed within the Time of Payment period.
- Payment of Guarantee money -- commonly about 20 to 30 % of the amount of fish.
- In case the amount of transaction exceeds the amount of b, the total sum must be immediately paid.
- In case the buyer does not comply with the conditions above, business with that buyer is prohibited and his name (company's name) is publicly announced as a social sanction. However, if receipt from his (the company's) payment is confirmed, such prohibition is removed.

### 3. Marketing Business

#### (4) How to cope with risks in collection of receivables

The following is a typical example to illustrate how "receivables collecting company" is involved in collecting risks on the part of FCA to collect receivables.

Day	Maximum amount of receivables collected by the Buyer	Maximum amount of receivables collected by the FCA
1	1,000,000 Yen	1,000,000 Yen
2	2,000,000 Yen	2,000,000 Yen
3	3,000,000 Yen	3,000,000 Yen
4	4,000,000 Yen	4,000,000 Yen
5	5,000,000 Yen	5,000,000 Yen
6	6,000,000 Yen	6,000,000 Yen
7	7,000,000 Yen	7,000,000 Yen
8	8,000,000 Yen	8,000,000 Yen
9	9,000,000 Yen	9,000,000 Yen
10	10,000,000 Yen	10,000,000 Yen
11	10,000,000 Yen	10,000,000 Yen
12	10,000,000 Yen	10,000,000 Yen
13	10,000,000 Yen	10,000,000 Yen
14	10,000,000 Yen	10,000,000 Yen
15	10,000,000 Yen	10,000,000 Yen
16	10,000,000 Yen	10,000,000 Yen
17	10,000,000 Yen	10,000,000 Yen
18	10,000,000 Yen	10,000,000 Yen
19	10,000,000 Yen	10,000,000 Yen
20	10,000,000 Yen	10,000,000 Yen
21	10,000,000 Yen	10,000,000 Yen
22	10,000,000 Yen	10,000,000 Yen
23	10,000,000 Yen	10,000,000 Yen
24	10,000,000 Yen	10,000,000 Yen
25	10,000,000 Yen	10,000,000 Yen
26	10,000,000 Yen	10,000,000 Yen
27	10,000,000 Yen	10,000,000 Yen
28	10,000,000 Yen	10,000,000 Yen
29	10,000,000 Yen	10,000,000 Yen
30	10,000,000 Yen	10,000,000 Yen
31	10,000,000 Yen	10,000,000 Yen

In the above example, the Buyer A has an agreement with the FCA in which the maximum amount of transaction agreed within the time of Payment period of day, for example 8 days, is 8,000,000 Yen, and the amount of guarantee money paid by A to the FCA is 8,000,000 Yen (80%).

On the 18th day, the total amount that has become more the maximum amount of transaction allowed within the time of Payment period, to the level of situation, the receivables collecting company pays 8,000,000 Yen to the FCA for the Buyer A on the 18th day.

Subsequently, the total amount of 8,000,000 Yen on the 18th day shall be paid by the receivables collecting company to the FCA for the Buyer A, when the receivables collecting company will continue to collect the receivables from the Buyer A until every payment of the Buyer's payment deadline.

In case the amount of receivable becomes large, the FCA may request transfer of the receivables to Cooperative Social Management of Receivables and Collection Co., Ltd. (or Member of "Coop Social Bankers").

### 3. Marketing Business

(5) Other important information and points in relation to marketing business

- Importance of buyers
- Resource Management
- Market information (already referred to earlier)

### 4. Supply Business

- Purchasing in bulk such as of fuel oil, fishing materials, commodities of daily living necessities, etc, and supplying them to member fishers at relatively favorable prices is the principle of Supply business.
- In the case of Japan, if I may say very roughly, out of the total demand for fuel oil of about 1.5 million kilo liter per year, JF ZENGYOREN supplies approximately a little over 40%. Formerly, the demand was about 2 million kilo liter and JF ZENGYOREN supplied about 50%.
- JF ZENGYOREN is a price leader in the sector of fuel oil supply to fishing vessels in Japan: commercial companies, seeing the price setting of JF ZENGYOREN, follows suit.
- Although full use by the member fishers of supply business is a target, the present percentage of, for example, use of fuel oil supplied by FCA member fishers via fisheries cooperative channels (JF ZENGYOREN-Prefectural Federation of FCAs-FCAs-Member fishers) is about 50%. (as of JFY 2011).

### 4. Supply Business

#### Principles

The principles of supply business of FCA are:

- Advance Ordering and Programmed purchasing and Supply
- Unconditional Consignment and Full Use
- Supply at Cost
- Settlement by cash

There are members of JF ZENGYOREN and FCAs which do not depend upon supply of fuel oil supplied by JF ZENGYOREN, and therefore, the above principles are difficult to achieve.

### 5. Fisheries Insurance

An Schematic Illustration of Harvest Insurance System

Unit: Thousand Yen

Average income/year = 30,000 ÷ 3 = 10,000

Difference = 5,000

Income from the fishery of this year

2006 2007 2008 2009 2010 2011 (= Contract year)

The government has helped maintain this harvest insurance system by subsidizing about half of the amount of insurance payment, unless there is government financial support in terms of insurance payment, this system does not seem to work, at least this is the conclusion reached at the International Symposium on the Regional Conference on Insurance and Credit for Sustainable Fisheries Development in Asia, Tokyo, Japan, 11-15 November, 1998 which JF ZENGYOREN and FAO, Rome co-organized.

6 Some of the issues which need be heeded and necessary when transferring Japan's FCA system to developing countries

Among others, government support including

- legal support
- Infrastructure building
- Credit/finance
- Insurance
- Various facilities
- Capacity building
- Management of fisheries resources etc

is essential for development of fisheries as well as FCAs. However, the most important of all is what you south American people refer often as "cooperativism", a spirit of solidarity and cooperation.

6 Some of the issues which need be heeded and necessary when transferring Japan's FCA system to developing countries

Some of the Excerpt from FAO's paper entitled "Success and Failure in Fishermen's Organizations" issued in 1990.

Quality of Management and Leadership

- The most important set of reasons for success or failure are concerned with the quality of management and leadership in the organization.

Marketing business

- Successful organizations seemed to have more freedom of maneuver in pricing agreements.
- Successful organizations tended to take responsibility for marketing all their members' fish.

Accounting

- Quality of financial management is critical to the success of organizations. Indicators of such quality include regular book-keeping and accountancy and allowances for depreciation and replacement of equipment.

6 Some of the issues which need be heeded and necessary when transferring Japan's FCA system to developing countries

Some of the Excerpt from FAO's paper entitled "Success and Failure in Fishermen's Organizations" issued in 1990. -continued-

Decision-making and control

- The board of directors should be elected by members only, and should consist of members only. The members and their board of directors should appoint their own chairman and secretary. The frequency of success appears higher in cases where the members are responsible for these positions.

Communication

- Successful organizations tended to be less isolated from main lines of communication than failing organizations.

Thank you very  
much

Muchisimas gracias

# APPENDIX 7: Establishing a Sanitary and Phytosanitary System to meet EU Requirements

Regional Workshop on Promoting the Development of Good Practices for Quality Assurance and Marketing of Fish and Fish Products



## Establishing a Sanitary and Phytosanitary System to meet EU Requirements

**The St. Vincent & the Grenadines Experience**

Kingstown, St. Vincent & the Grenadines  
February 15<sup>th</sup> – 17<sup>th</sup>, 2012

Presented by: Lucille Grant  
Fisheries Officer - Quality Assurance and Product Development  
Fisheries Division  
MARTTY, S/G

## Fishing Industry in St. Vincent and the Grenadines

**PHYSICAL CHARACTERISTICS**

- Land area: 345 square kilometres
- EEZ: 27,500 square kilometres
- Shelf area: 7,800 square kilometres



**SOCIO-ECONOMIC IMPACT**

- 2% contribution to GDP
- 2500 full and part time fishermen
- 500 vendors, gutters, tradesmen, etc.
- 750 registered fishing vessels (CARIFIS, 2011)

## Fishing Industry in St. Vincent and the Grenadines

- Predominantly small scale and artisanal, employing traditional gear, methods and vessels.
- Majority of fishing vessels are open and powered by outboard engines.
- Vessels exploit both oceanic and inshore pelagics as well as the shelf and deep slope demersals.
- Most fishermen are daily operators, going out to sea in the morning and returning to land in the late afternoon or evening.
- Annual landings: approximately 1.8 million lbs (2006 – 2010)
- Annual exports: approximately 0.21 million lbs (2006 – 2010)

## Landing Sites



•Different types

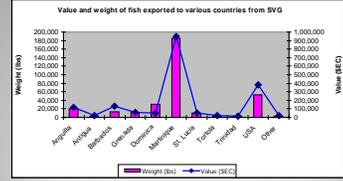
•7 Fishing Centres all donated by Gov't of Japan



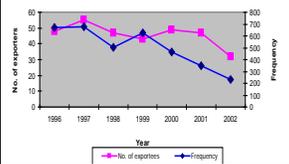
### Products Intended for Export to EU

- Live Lobsters
- Spiny lobster
- Fresh Fish
- Mahi mahi
- Wahoo
- Snappers
- Groupers
- (Any other as the EU would take)

### Why EU?



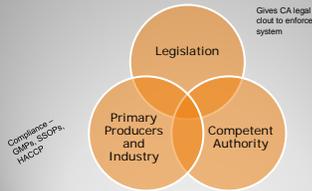
Number of exportees and frequency of exports from SVG (1996-2002)



### Comparison between EU and US market requirements

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• United States – company oriented</li> <li>• GMP, SSOP, HACCP, product traceability</li> <li>• The importer is responsible for verifying that products imported are from companies which have HACCP in place</li> <li>• Border inspection</li> </ul> | <ul style="list-style-type: none"> <li>• European Union – system oriented</li> <li>• Requirements for facilities, general and specific hygiene criteria, HACCP, product specification, traceability, compliance with IUU requirements</li> <li>• The CA of the country is approved to verify that companies which export to EU are in compliance with requirements</li> <li>• Border inspection</li> </ul> |
|--|--|

### EU Market Requirements: Three Main Components



### History of SVG EUFVO Inspections

- 2 inspections: 1) 31Jan – 04 Feb., 2000
- 2) 24 – 28 Nov., 2008

Reports:  
[http://ec.europa.eu/food/fs/inspections/vireports/st\\_vincent\\_grenadines/st\\_rep\\_svg\\_1040\\_2000\\_en.pdf](http://ec.europa.eu/food/fs/inspections/vireports/st_vincent_grenadines/st_rep_svg_1040_2000_en.pdf)  
[http://www.ec.europa.eu/food/vfo/act\\_oePDF.cfm?PDF\\_ID=7141](http://www.ec.europa.eu/food/vfo/act_oePDF.cfm?PDF_ID=7141)

## History of SVG EUFVO Inspections

### Summary of results

The 2008 mission concluded, overall, that the control system developed by the CA in respect of fishery products intended for export to the EU could provide appropriate guarantees in accordance with Community legislation **if it were implemented properly**.

However, it was not possible to evaluate the effectiveness of the control system because it was not being implemented at the time of the mission.

## History of SVG EUFVO Inspections/ 2

### FVO 2008 Mission Report made 3 Recommendations:

#### 1<sup>st</sup> Recommendation

The CA should ensure:

- "that the **training of all staff involved in signing of the export certificates and performing official controls in relation to the Community fishery product export requirements is further enhanced in order to ensure adequate knowledge**"

## History of SVG EUFVO Inspections/ 3

### 2<sup>nd</sup> Recommendation

The CA should ensure:

- "that a **programme based on the HACCP principles in accordance with Art. 5 of Regulation 852/2004 is in place, implemented and maintained at the establishments**. In particular the CA should verify that FBOs have procedures in place to ensure that fishery products to be exported to the EU satisfy the health standards laid down in ... Regulation (EC) No. 853/2004 and where relevant they are included in the HACCP plan

## History of SVG EUFVO Inspections/ 4

### 3<sup>rd</sup> Recommendation:

The CA should ensure:

- "that **standards equivalent to those laid down in ... Regulation (EC) No. 852/2004 ... are implemented and controls should be established in this respect**"

(Main issue: Laboratory testing to verify product is safe and free from contaminants)

## Our Response

Action Plan that focused heavily on:

- provision of various forms of **training** for inspectors and industry
- Engagement of **qualified staff** and service providers
- Establishment of **agreements** with other government agencies
- Procurement of equipment and supplies to support **lab analysis and testing**
- **Further refinement** of CA's inspection manual and systems

## Other works done after FVO 2008 Mission

2009

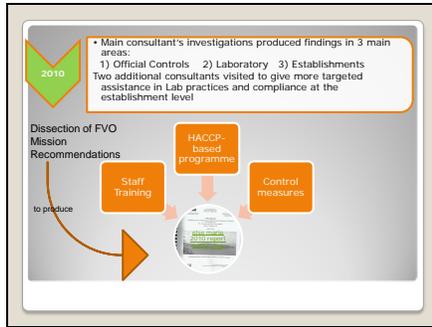
- CA made request through TradeCom Facility for assistance with implementing necessary corrective actions following FVO 2008 Mission

2010

- Hosted 3 consultants during the year
- Consultants had specific tasks.
- 1) Official Controls 2) Laboratory 3) Establishments

2010 - present

- Competent Authority commenced straightway the evaluation and implementation of recommended tasks



**Recommendations and Implementation Status**  
- *Legal Framework* -

ISSUE	2008 ASSESSMENT		
	RECOMMENDATION	IMPLENT. STATUS in 2012	
1. The Legal Framework-work	1a	<p><b>The Fisheries Regulation of 2006</b> CA shall evaluate along with Attorney General the required updates to the legislation</p>	<p><b>INCOMPLETE</b> Some main issues which need to be added/updated: -Labeling requirements -Traceability -EU requirements</p>
	1b	<p><b>The Fisheries Regulation of 2006</b> Checklist for inspections should be excluded from Fisheries Regulations Regulations should stipulate that CA shall develop checklists, with reference to the Regulation, to use for inspection and reporting purposes</p>	<p><b>COMPLETED</b> Provision in existing legislation for development if these documents</p>

**Recommendations and Implementation Status**  
- *Legal Framework* -

ISSUE	2008 ASSESSMENT		
	RECOMMENDATION	IMPLENT. STATUS in 2012	
1. The Legal Framework-work	1c	<p><b>Export of coach to the EU market</b> Export of Coach: Establishment of monitoring programmes should not be assigned a high priority due to detailed and demanding requirements which require the specific approval of the EU Food Safety authorities. Amended regulations should include provisions for monitoring programmes to be established and implemented.</p>	<p><b>INCOMPLETE</b> In discussion.</p> <p><b>INCOMPLETE</b> Issue of updating legislation.</p>

**Recommendations and Implementation Status**  
- *Standard Operating Procedures for the Competent Authority* -

ISSUE	2008 ASSESSMENT		
	RECOMMENDATION	IMPLENT. STATUS in 2012	
2. Standard Operating Procedures for the Competent Authority	2a	<p><b>Inspection Manual</b> Production of a short, tightly focused manual which addresses realistic practices for the implementation of official control</p>	<p><b>COMPLETED</b> A 2<sup>nd</sup> edition (2011) was produced. Reviewed by EU Consultant. Pending is an online meeting with consultant to further discuss this along with other (Laboratory) documents.</p>
	2b	<p><b>Inspection Manual</b> CA should seek and receive technical assistance to validate and complete the new version of the Inspection Manual for Official Control of Fisheries Products</p>	<p><b>COMPLETED</b> A 2<sup>nd</sup> edition (2011) was produced. Reviewed by EU Consultant. Pending is an online meeting with consultant to further discuss this along with other (Laboratory) documents.</p>

**Recommendations and Implementation Status**  
- *Standard Operating Procedures for the Competent Authority* -

ISSUE	2008 ASSESSMENT		
	RECOMMENDATION	IMPLENT. STATUS in 2012	
2. Standard Operating Procedures for the Competent Authority	3a	<p><b>Organizing Official Control</b> Head of CA should not be a fixed member of the Board of Directors at the centres subject to official control</p>	<p><b>COMPLETED</b> CFO no longer on BOD of any of the fish establishments</p>
	3b	<p><b>Organizing Official Control</b> The Quality Assurance and Product Development Unit should be re-organized so that a small group becomes responsible for planning and implementing official controls and other staff members are responsible for product development and technical assistance.</p>	<p><b>COMPLETED</b> Organized such that persons conducting inspections are not the same persons verifying/signing off on certificates</p>

**Recommendations and Implementation Status**  
- *Standard Operating Procedures for the Competent Authority* -

ISSUE	2008 ASSESSMENT		
	RECOMMENDATION	IMPLENT. STATUS in 2012	
2. Standard Operating Procedures for the Competent Authority	3c	<p><b>Organizing Official Control</b> MOU with Environmental Health Department and Animal Health and Production Services shall be implemented to the point that inspectors from the two institutions are appointed to participate in inspection teams for the sake of resources as well as impartiality.</p>	<p><b>ONGOING</b> Four (additional) inspectors from the Public Health Department and the Animal Health and Production Department scheduled to be appointed as Fish Inspectors at the end of next Fish Inspectors Workshop in March, as it is allowed by MOU between the three departments.</p>

Recommendations and Implementation Status - Standard Operating Procedures for the Competent Authority		
ISSUE	2008 ASSESSMENT	
	RECOMMENDATION	IMPLEMENT STATUS in 2012
2. Standard Operating Procedures for the Competent Authority	4 <b>Enforcement</b> CA shall ensure that establishments without a valid licence cannot operate, as stipulated in Fisheries Regulations of 2006, Section 45 and 46 and EU Regulation (EC) 854/2004, Article 12.  CA may wish to change the procedures for licence renewal so that it becomes 'automatic', subject to annual audit and payment of licence fees, unless informed by the company informs the CA that they will cease operations.	ONGOING While there have been, and still are, to some extent issues with enforcement, establishments are generally closer to actual compliance now than ever before.  ONGOING On the list for inclusion in the manual during this year's Inspection Manual review meeting.

Recommendations and Implementation Status - Standard Operating Procedures for the Competent Authority		
ISSUE	2008 ASSESSMENT	
	RECOMMENDATION	IMPLEMENT STATUS in 2012
2. Standard Operating Procedures for the Competent Authority	5 <b>Inspection and audit practices</b> Reporting procedures should be changed to include clear corrective action requests in response to non-compliances and to require feedback from establishments and direct follow-up by inspectors.	COMPLETED - Reporting procedures changed. CARs and CAPs now required. Follow-up inspection schedules also drawn up and followed.

Recommendations and Implementation Status - Standard Operating Procedures for the Competent Authority		
ISSUE	2008 ASSESSMENT	
	RECOMMENDATION	IMPLEMENT STATUS in 2012
2. Standard Operating Procedures for the Competent Authority	6a <b>Checklist HACCP system documentation and implementation</b> The current inspection checklist should be upgraded to provide for assessment of HACCP system documentation implementation	COMPLETED - Checklist upgraded to one recommended by consultant. Included in CASOP Manual.
	6b <b>Checklist HACCP system documentation and implementation</b> Further training to be arranged for both inspectors and establishments in developing HACCP-based procedures in regard to SVG and EU regulations.	COMPLETE Training acquired through BSL, CROSO, CARRI, etc. Mostly to the benefit of inspectors. Needs to be sustained.

Recommendations and Implementation Status - Standard Operating Procedures for the Competent Authority		
ISSUE	2008 ASSESSMENT	
	RECOMMENDATION	IMPLEMENT STATUS in 2012
2. Standard Operating Procedures for the Competent Authority	7 <b>Monitoring of freshness, nematodes, histamine</b> Training to be arranged for Data Collectors to carry out monitoring during initial handling of fish at landing sites.	ONGOING - Inspection Landing Sites Inspection Form is developed and contained in the CA SOP Manual. Initial training done in 2011. Monitoring to commence after second training at Fish Inspectors Workshop in March.

Recommendations and Implementation Status - Standard Operating Procedures for the Competent Authority		
ISSUE	2008 ASSESSMENT	
	RECOMMENDATION	IMPLEMENT STATUS in 2012
2. Standard Operating Procedures for the Competent Authority	8 <b>Monitoring of Environmental Contaminants</b> Specific and targeted sampling and testing programme should be established for monitoring of levels of heavy metals in products of marine origin.	ONGOING Samples of water, fish sent to CARRI last year. Tests for which they are not accredited were outsourced to an accredited lab. Results good. Needs to be sustained according to schedule. Cost restrictive.

Recommendations and Implementation Status - Standard Operating Procedures for the Competent Authority		
ISSUE	2008 ASSESSMENT	
	RECOMMENDATION	IMPLEMENT STATUS in 2012
2. Standard Operating Procedures for the Competent Authority	9 <b>Issuing of Health Certificates</b> New procedure for issuing of EU certificate should be implemented.	COMPLETED

**Recommendations and Implementation Status**  
*- Standard Operating Procedures for the Competent Authority -*

ISSUE	2008 ASSESSMENT	
	RECOMMENDATION	IMPLET. STATUS in 2012
2. Standard Operating Procedures for the Competent Authority	<p>NA</p> <p><b>IIU Fishing*</b></p> <p>Develop national strategy to address IIU fishing.</p> <p>Ensure registration of all fishing vessels.</p>	<p><b>INCOMPLETE</b></p> <p>ONGOING</p> <p>Vessel registration procedures revised and new sensitization and inspection programme was launched in 2011.</p>

\*Not in report

**Recommendations and Implementation Status**  
*- Laboratory Services -*

ISSUE	2008 ASSESSMENT	
	RECOMMENDATION	IMPLET. STATUS in 2012
3. Laboratory Services	<p>10</p> <p><b>Fisheries Lab. Quality Management</b></p> <p>Requirements of mandatory EU test methods should be matched to equipment and other resources in order to establish a strategy to define the parameters to be implemented at the Fisheries Lab.</p> <p>Specific documentation of equipment control, calibration and maintenance should be initiated.</p>	<p><b>COMPLETED</b></p> <p>ONGOING</p>

**Recommendations and Implementation Status**  
*- Laboratory Services -*

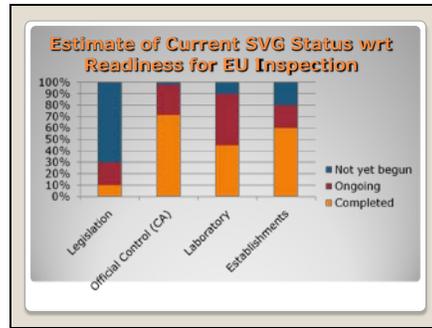
ISSUE	2008 ASSESSMENT	
	RECOMMENDATION	IMPLET. STATUS in 2012
3. Laboratory Services	<p>10</p> <p><b>Fisheries Lab. Quality Management</b></p> <p>Fisheries Lab should seek and receive hands-on technical assistance to establish and implement a quality management system according to requirements set out in ISO 17025, including ensuring communication with labs sub-contracted for parameters that cannot be implemented in their own lab.</p>	<p><b>COMPLETED</b></p>

**Recommendations and Implementation Status**  
*- Laboratory Services -*

ISSUE	2008 ASSESSMENT	
	RECOMMENDATION	IMPLET. STATUS in 2012
3. Laboratory Services	<p>11</p> <p><b>MOU with CARIRI</b></p> <p>Request of CARIRI that they clarify to which parameters, methods and performance criteria they are accredited.</p> <p>Where CARIRI is not accredited, other labs should be identified.</p>	<p><b>COMPLETED</b></p> <p>ONGOING</p> <p>Currently investigating two labs in Martinique - Martinique General Council Analytical Laboratory, PARM Laboratory</p>

**Recommendations and Implementation Status**  
*- The Processing Industry -*

ISSUE	2008 ASSESSMENT	
	RECOMMENDATION	IMPLET. STATUS in 2012
4. The Processing Industry	<p>11</p> <p><b>Training</b></p> <p>Processing industry should receive further training and direct hands-on assistance in documenting and specifically implementing all necessary pre-requisite programmes and HACCP Plan programmes with specific focus on monitoring and follow-up to results of the monitoring.</p>	<p>ONGOING</p> <p>In October/November, 2011, Fisheries personnel spent two weeks with one establishment (NFML) to help review and implement the quality assurance system once again.</p> <p>Plan was reviewed and some changes made. Supporting record sheets for system monitoring were formulated. System is improved.</p>



### Pending Issues and the way forward

- Rectify legislation ASAP
- Build lab capacity through in-country cross-testing to build credibility of results generated in the Fisheries Lab.
- Refuse to let the issue of enforcement of legislation, official procedures rest. It is the only way we prove that we are 'competent'. Continue work to improve plant licensing system.
- Plan national strategy to address IUU requirements.
- Obtain technical assistance (JICA) during next five months for assistance with guiding two lobster facilities towards EU compliance and gaining authorization to export to the EU.

### Case Study: National Fisheries Marketing Limited

### Recognise any of these? (No show of hands)

### Case Study: National Fisheries Marketing Limited

### Record of Improvement in Fish Quality Assurance at National Fisheries Marketing Limited /1

**Infrastructure**

2004 – Assistance from Japanese government to reconstruct the Kingstown Fish Market

Notable upgrades:

- Concrete landing facilities
- Ice machines and cold storage
- Easily washable epoxy resin floors
- Unidirectional product flow
- Fitted ice holds with covers in vending area

### Record of Improvement in Fish Quality Assurance at National Fisheries Marketing Limited /2

**GMPs**

QA Training Workshops organised by Fisheries Division

- > Innovative, Staff choir, Quality models, skits, Interactive
- > 'Lose the sponge' to discourage bad practices

Train establishment personnel in Good Manufacturing Practices (GMPs) using knowledge gained and materials obtained (posters, videos, raw information) from various 'Train the Trainers Workshops' and experts attached to Fisheries Division

Audits. Daily inspection of practices and facility and constant offering of advice to correct faulty practices.

SAMPLE

**Bad Practices vs. Good practices**

Bad	Good
Sponge	Cloth / Rag
Guts and water on floor	Dry clean floor
Cutting board - dirty	Cutting board - clean
Ice bottom side of fish	Ice whole fish
Fish bins covered	Open bins

**Record of Improvement in Fish Quality Assurance at National Fisheries Marketing Limited / 3**

**Documentation**

2004 – Draft legislation was completed and sent to AG's office. Made official in 2006. Baseline for elaboration of all other documents.

**STANDARD OPERATING PROCEDURES, SSOPs, HACCP Plans.** – Series of workshops held with NFML staff to gather information and assist them with elaborating SOPs, using the opportunity as a means for training.

After completion of Seafood HACCP Wshop, a series of work sessions were set up. QAPD Unit met as often as weekly with NFML HACCP members to jointly elaborate HACCP Plans, record sheets, etc..

**Record of Improvement in Fish Quality Assurance at National Fisheries Marketing Limited / 4**

**Technical Support**

- 2000 – 2010: Toshihara san (JICA Fisheries Expert)
- 2004 – Jose FU Wong (Cuban Expert in Quality Assurance)
- 2007: Training in Seafood HACCP – first formal training in elaboration of HACCP Plans. Training done by USDC/NOAA.
- 2010: EU consultants after 2<sup>nd</sup> EU FVO Mission (3 technical experts)
- Government of SVG (Subsidies, monetary grants)
- Ongoing – Each year workshops conducted by Fisheries Division: Audits, routine and ad-hoc inspection visits, technical advice, etc., facilitated by mutual desire to see development of industry

**Record of Improvement in Fish Quality Assurance at National Fisheries Marketing Limited / 5**

**Work done in 2011 as evidenced by Audit Results**

April, 2011 → Dec, 2011

**Level V** – No licence to operate facility  
Re-registration of establishment (Public Health)

**Level I** – Licence to export, no penalties

**Level II** – Licence to export, Licence to operate, Routine and ad-hoc inspections, Re-evaluation after one quarter.

**Record of Improvement in Fish Quality Assurance at National Fisheries Marketing Limited / 6**

**Audit Results – Some determining factors**

April → 2011

**Major Sore Points over the years (slow/no improvement):**

- No approved lab testing for water, fish
- HACCP records out of sync with HACCP plan
- Disorganised records; lack of verification of records by supervisor/management

**Improvement in 2011:**

- Improvement of in-house monitoring. Initiative taken to contact testing facility. CA carried out approved lab testing of fish, water and food contact surface swabs. +ve results
- Greater effort made at keeping records to support HACCP plan
- Record keeping improved and records verified and signed by Manager.

**CHALLENGES**

- > **The ever-present issue of enforcement** – Has always been a difficult decision to close establishments that are the main entry of fish into the country because of the social, economic and political implications.
- > Until this changes, we have to take another approach. We need to get the industry to the level at which we all desire to see them operate and think with a business head. "Better quality means more business".
- > Means for change: - Continued training (mandatory), implementation of less devastating measures such as fines, etc.
- > **Fishermen**. Limited funds, lack of money-management skills, illiteracy, customs hard to break.. lack of trust because of past bad experiences. – implications for the cooperatives. List goes on.

**CHALLENGES**

- > Incentives for fishermen (higher price for better quality – something that is yet to be seen, despite the many success stories of this approach)
- > Not enough high-level/professional training for CA on matters related to quality assurance.
- > Establishments do not place as high a priority on training as they do on financial aspects.
- > Quality cost\$... (and pays in the long run.)
- > Quality must occupy its rightful place in all spheres of the industry if we are to convince ourselves, that we are really serious about competing globally.
- > Commitment must be shown to the process from the top, down.
- Many more...

When the going gets, tough...



Therefore, plan is to:  
Continually work with NFML towards greater and greater organisation of and compliance with systems in place at NFML.

## APPENDIX 8: Improving the Operational Efficiency of Fisheries Facilities



### Overview of landing site

- Landing sites in St. Vincent and the Grenadines are zoned and categorised.
- There are seven zones which comprised of thirty-six landing sites.
- A landing site is categorised as Primary, Secondary and Tertiary based on the number of fishing boats that regularly land fish at the site, the amount of fish landed at the site and the level of infrastructural development.
- There are two primary, fourteen secondary and twenty tertiary sites in St. Vincent and the Grenadines.

### Calliaqua Landing Site

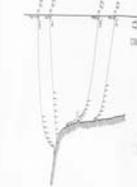
- Calliaqua is the most southern landing site located on main land St. Vincent.
- It is a secondary landing site located in zone one.
- It has 115 registered fishers.
- It has thirty-five registered fishing vessels, mainly pirogues.
- The fishermen fished mainly for demersal species concentrating mainly on the red snappers.

### Map of St. Vincent and the Grenadines



### Fishing gear type

- Fishing gear type:
  - Palang (Bottom horizontal longline)
  - Standing palang (Vertical)
  - Handline
  - Trolling
  - Beach seine



### Fishing season and gear used

- Palang, being done in conjunction with handline; is conducted from January – December.
  - Fishing days 180
  - Target – snappers and groupers
- Standing palang, being done in conjunction with handline; is conducted from June – December.
  - Fishing days 120
  - Target – snappers and tunas.



## Fishing season and gear used

- Trolling is being conducted from December - June.
  - Fishing days 96
  - Target species – Dolphin fish, Kingfish and Tunas
- Beach seine all year round.
  - Target species – Round and Big-eyed scads



## Fishing vessels

- The fishing boats are mainly small open pirogues with a few wooden boats used in the beach seine fishery.
- Crew 2 – 3 per boat 9-13 beach seine
- Depart early in the morning and return late afternoon.
- Fishing ground mainly on the east coast of St. Vincent and the Grenadines.



## Fishing vessels at landing site



## Marketing

- Fishermen market their catch themselves.
- In the high season approximately 50% of their catch is sold to vendors.
- Fish landed:
  - an average of 150 lbs. of demersal
  - 300 lbs. dolphin and kingfish
  - 30 lbs. tuna



## Fish price

- Prices vary according to abundance and season.

- Average price:
  - Demersals \$7.5 per lb.
  - Dolphin and kingfish 6.5 per lb.
  - Tuna \$4 per lb.



## Operational cost per trip: Trolling

Expenditure (\$)		Income (\$)	
		Fish sale: (Ave 300 lbs.)	
• Gasoline	584.00	• Dolphin (60%)	1,170.00
• Gear	25.00	• Kingfish (30%)	585.00
• Bait	50.00	• Tuna (10%)	120.00
• Food	40.00		
• Oil	97.00		
<b>Total</b>	<b>796.00</b>	<b>Total</b>	<b>1,875.00</b>

### Operational cost per trip: Palang

Expenditure (\$)		Income (\$)	
		Fish sale ( Ave 150 lbs.)	
• Fishing gear	125.00	• Red snapper (80%)	900.00
• Bait	250.00	• Tunas (10%)	60.00
• Gasoline	262.00	• Shark (5%)	37.50
• Oil	39.00	• Others (5%)	56.25
• Food	15.00		
• Ice	20.00		
<b>Total</b>	<b>711.00</b>	<b>Total</b>	<b>1,053.75</b>

### Operational cost per trip: Standing palang

Expenditure (\$)		Income (\$)	
		Fish sale: (Ave 125 lbs.)	
• Fishing gear	125.00	• Red snapper 80%	750.00
• Bait	250.00	• Tuna 10%	50.00
• Gasoline	262.00	• Shark 5%	31.25
• Oil	39.00	• Other 5%	46.88
• Food	15.00		
• Ice	20.00		
<b>Total</b>	<b>711.00</b>	<b>Total</b>	<b>878.13</b>

### Capital cost (trolling)

• Vessel (25ft)	\$32,000.00
• Engine (75 hp)	\$14,000.00
• Gear	\$ 3,000.00
<b>Total</b>	<b>\$49,000.00</b>

### Capital Investment (Palang)

• Vessel (25ft)	\$32,000.00
• Engine (75 hp)	\$14,000.00
• Gear	\$10,000.00
<b>Total</b>	<b>\$56,000.00</b>

### Capital Investment (standing Palang)

• Vessel (25ft)	\$32,000.00
• Engine (75 hp)	\$14,000.00
• Gear	\$ 5,000.00
<b>Total</b>	<b>\$ 51,000.00</b>

- ### Fisheries facilities
- There are 9 Fisheries Centres in St. Vincent and the Grenadines.
    - Five on mainland St. Vincent.
    - Four in the Grenadines.
  - Eight Fisheries centres are operational while one is closed.
    - Three are operated by central government.
    - Two are operated by private companies.
    - One is operated by a Fisherman's Cooperative.
    - One is operated by a statutory body.

## Calliaqua Fisheries Centre

- Completed in 1997.
- Built through assistance from a Japanese Grant Aid Programme.



## Facilities and services of centre

- Jetty
- Fishermen's lockers
- Ice making machine
- Cold Storage
- Fuel depot (not working)
- Toilet and shower
- Retail market



## Management of Centre

- Fisheries Division assumed management of the centre after completion to provide the services of the sale of ice and fuel, storage of fish and rental of lockers.
- The Fisheries Division through its work established the Calliaqua Fisher folk Cooperation (CALFICO).
- The Centre was then leased to CALFICO from 1<sup>st</sup> December 2004.

## CALFICO Management

- CALFICO provided a number of services including :
  - Purchase and sale of fish
  - Storage of fish
  - Sale of ice
  - Rental of lockers
  - Landing toll collection.



## CALFICO Problems

- Financial problems:
  - This was highlighted when the ice machine malfunctioned and was not repaired owing to the lack of funds and the disconnection of utilities services.

### Hygiene standards:

The standards for the distribution of fish at the centre deteriorated to unaccepted levels.

### Accountability issues:

Issues of accountabilities arose which resulted in operations at the centre become unsustainable.

## Centre solution

- Given the situation, the Fisheries Division recommended that a committee be put in place to re-establish management of the centre.
- The Division also recommended urgent effort be made to facilitate the reconnection of the utilities.
- The committee discussed and agreed on resolution to the problems encountered by CALFICO and made recommendations to establish sustainable operations at the centre.

### The Committee Activities

- **Short term:**
  - Assume control of the facilities at least for six months.
  - Institute a team to manage the centre.
  - Establish a proper accounting system.
  - Clean the compound and reconnection of all utilities.

### The Committee Activities

- **Medium to long term:**
  - The Fisheries Division will work along with the Cooperative Division to ensure CALFICO is sustained.
  - Construct an additional ten fisherman's lockers.
  - Upgrade and re-establish the fuel supply.
  - Construct a small facility for cleaning fish.

### Cost cutting measures

- Reduce the production of ice.
- Operate chill room according to demand.
- Turn lights off at night.
- Turn off the water supply when centre closes at nights.
- Clean and wash with sea water when necessary.
- Supervise the cleaning of compound after usage.

### Challenges

- Fishermen reluctant to pay for the use of the facilities.
- It is difficult to get fishers to participate in the management of the centre and CALFICO.
- Lack of funding from the authorities to manage the facility.
- Old and poor maintenance of machinery make it difficult to manage the centre.

### Proposed income and expenditure statement per month

Expenditure (s)		Income (s)	
• Utilities	3,400.00	• Ice sale	2400.00
• Salaries & wages	2500.00	• Locker fees	500.00
• Maintenance	450.00	• Landing toll	2000.00
• Office supplies	75.00	• Rental	500.00
• Cleaning	106.00	• Cold storage	900.00
• Misc.	149.00		
	<u>6,680.00</u>		<u>6300.00</u>

### Actual income and expenditure statement (July – December 2011)

Expenditure (s)		Income (s)	
• Electricity	8,725.00	• Lockers	1,420.00
• Water	1,452.00	• Sale of ice	3,757.00
• Salaries	5,760.00	• Landing toll	2,014.00
		• Storage	700.00
<b>Total</b>	<b>15,938.35</b>		<b>7891.40</b>
			Loss = 8046.95

### Way forward

- Organise training workshops with the membership of CALFICO on institutional strengthening, capacity building, business management and proper accounting.
- Have discussions with fishermen from Calliaqua encouraging them to join CALFICO.
- Present the current financial situation of the centre to the fishermen so they will be aware of the financial situation of the centre.

### Way forward con't

- Formulate and implement a management plan for the centre.
- Develop an operational plan for the centre.



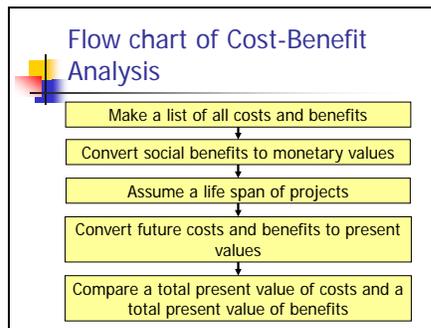
## APPENDIX 9: Cost-Benefit Analysis of Fisheries Centres

### Cost-Benefit Analysis of Fisheries Centers

Japan Overseas Cooperation Volunteer  
Kei Kusaka

### What is Cost-Benefit Analysis?

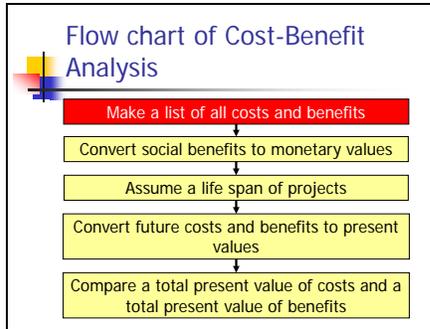
- A kind of business analysis
- Used for project evaluation
- Whether projects make profits or deficits over the life span



### Subject for the analysis



Owia Fisheries Complex (OFC)  
The opening year: 2009

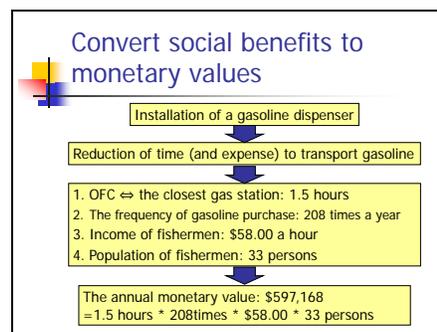
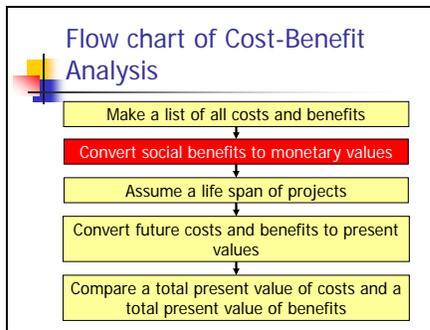


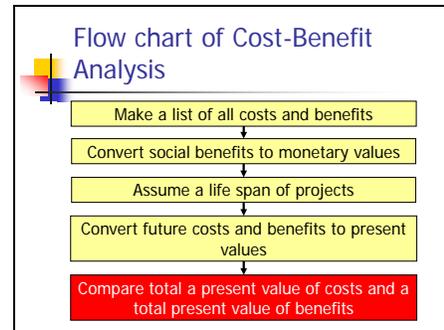
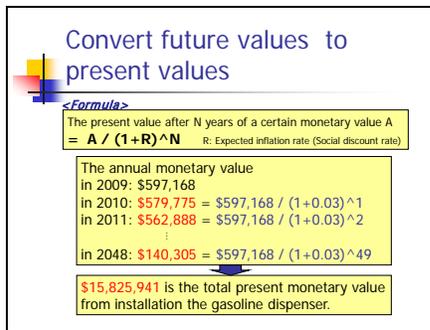
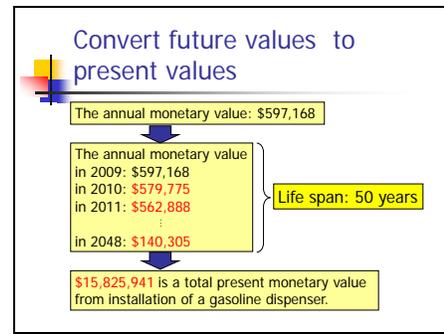
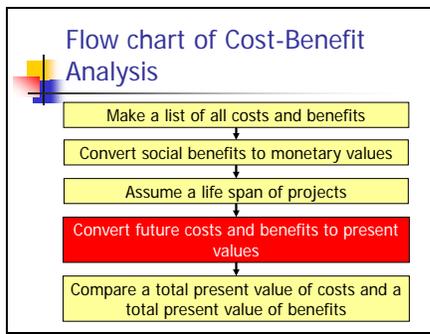
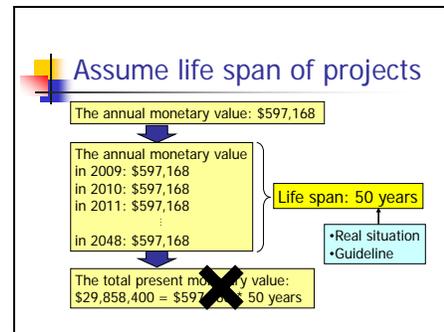
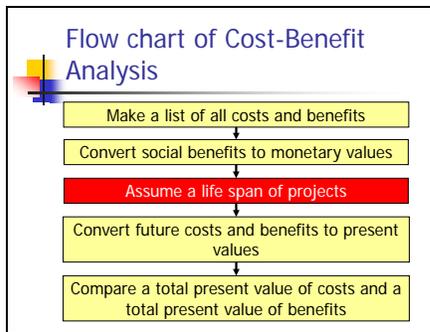
### Costs and benefits on Owia Fisheries Complex

Costs	
Explicit costs (Necessary expenses)	Implicit costs (Capital costs)
Purchase of fish Personal expenses Electricity bill etc.	Depreciation of the building Depreciation of the building equipment
Benefits	
Explicit benefits (Sales of items)	Implicit Benefits (Social benefits)
Sales of fish Sales of gasoline Sales of fishing tackles etc.	Reduction of the frequency of vessel repairs by construction of a jetty etc.

- ### List of all costs and benefits
- **Implicit costs (Capital cost)**
    - Depreciation of the building
    - Depreciation of the equipment
  - **Implicit benefits (Social benefit)**
    - Reduction of time to prepare departure and arrival for fishing by construction of a jetty
    - Reduction of time to shelter vessels by construction of a jetty
    - Reduction of time to transport fuel and fishing tackle by installing a fuel dispenser and a fishing tackle shop
    - Reduction of expense to transport fuel and fishing tackle by installing a fuel dispenser and a fishing tackle shop
    - Extension of a vessel life by construction of a jetty
    - Reduction of the frequency of vessel repairs by construction of a jetty
    - Increase of the frequency of fishing by construction of a jetty

- ### List of all costs and benefits
- Increase of the fishing chances in remote fishing areas by construction of faster and bigger vessels by virtue of construction of a jetty
  - Increase of the amount of distribution of fish for distributors by increase of the amount of catch
  - Enhancement of sales prices of fresh fish by hygiene management
  - Assurance of security for houses located behind a jetty by its construction
  - Acceptance of overseas vessels during inclement weather
  - Contribution to marine salvage
  - Conservation of regional culture
  - Reduction of the frequency of injuries of fishermen by construction of a jetty





### Summary of the analysis - total present values of costs

Analyzed costs	Total present value of costs
Depreciation of the building	\$410,245,649
Depreciation of the equipment	\$17,226,077
<b>Total present value of costs</b>	<b>\$427,471,726</b>

### Summary of the analysis - total present value of benefits

Analyzed benefits	Total present values for 50 years
Reduction of time to prepare departure and arrival for fishing by construction of a jetty	\$53,195,762
Reduction of time to shelter vessels by construction of a jetty	\$22,502,057
Reduction of time to transport fuel and fishing tackle by installing a fuel dispenser and a fishing tackle shop	\$26,180,916
Reduction of expense to transport fuel and fishing tackle by installing a fuel dispenser and a fishing tackle shop	\$1,338,586
Extension of a vessel life by construction of a jetty	\$171,636
Reduction of the number of vessel repairs by construction of a jetty	\$12,692,027
Increase of the frequency of fishing by construction of a jetty	\$7,853,664
Increase of the fishing chances in remote fishing areas by construction of faster and bigger vessels by virtue of construction of a jetty	\$161,126

### Summary of the analysis - total present value of benefits

Analyzed benefits	Total present value of benefits
Increase of the amount of distribution of fish for distributors by increase of the amount of catch	\$26,980,473
Enhancement of sales prices of fresh fish by hygiene management	\$31,821,984
Assurance of security for houses located behind a jetty by its construction	\$3,496,827
Acceptance of overseas vessels during inclement weather	\$67,908
Contribution to marine salvage	\$5,110,111
Conservation of regional culture	\$180,815
Reduction of the frequency of injuries of fishermen by construction of a jetty	\$4,077,301
<b>Total present value of benefits</b>	<b>\$416,835,093</b>

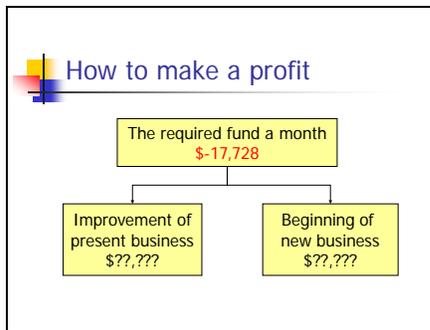
### Comparison between total present value of costs and benefits

Total present value of costs (A)	\$427,471,726
Total present value of benefits (B)	\$416,835,093
<b>Net present value (A-B)</b>	<b>-\$10,636,633</b>
<b>Cost-benefit ratio (B/A)</b>	<b>0.98</b>

↓

**This needs to be filled with sales of Owia Fisheries Complex, so that the Cost-benefit ratio can exceed 1.**

The required fund a year (A-B)/50	<b>-\$212,733</b>
The required fund a month (A-B)/50/12	<b>-\$17,728</b>



# APPENDIX 10: Project Cycle Management

## PCM

### Project Cycle Management

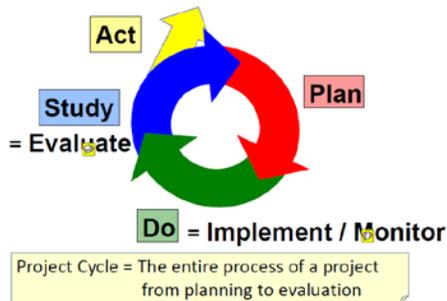
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#### Contents

1. Summary of PCM 
2. Stakeholders Analysis (Analytical Stage 1)
3. Problems Analysis (Analytical Stage 2)
4. Objectives Analysis (Analytical Stage 3)
5. Project Selection (Planning Stage 1)
6. Project Design Matrix (PDM) (Planning Stage 2)
7. Plan of Operation (Planning Stage 3)

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#### 1-2. Project Cycle



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7. Plan of Operation (Planning Stage 3)

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#### 1-1. Project

Project is work / service to achieve a specific target

- ◆ within a set **time frame**
- ◆ using limited **facilities, equipment and material**
- ◆ within a set **budget**
- ◆ by a **group of people formed as a team**



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#### 1-5. PCM Process

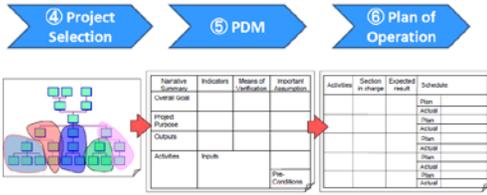
##### (1) Analytical Stage



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**1-5. PCM Process**

**(2) Planning Stage**



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**2-1. Purpose of Stakeholders Analysis**

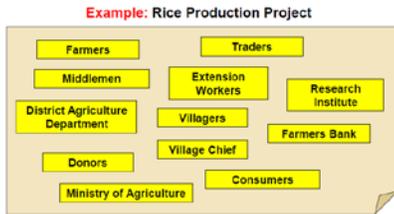
- ◆ To identify a tentative target group (the expected major beneficiary of the future project).
- ◆ To share information regarding individuals, groups, and organizations which would have any relationship with the future project.

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**2-2. Procedure of Stakeholders Analysis**

- (1) List the names of stakeholders (organizations, groups, individuals).



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**2-2. Procedure of Stakeholders Analysis**

- (4) Analyze the important stakeholders.
- (5) Select a tentative target group.

	Characteristics	Problems	Strengths	Weaknesses	Opportunities	Threats
Villagers	120 families 800 people They may become implementing agency	Low income from agriculture Low production Shortage of water	Spirits of cooperation Spirits of sharing	Small land for cultivation Limited information on price	Available water source	Unstable weather

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**Contents**

1. Summary of PCM
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4. Objectives Analysis (Analytical Stage 3)
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6. Project Design Matrix (PDM) (Planning Stage 2)
7. Plan of Operation (Planning Stage 3)

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**2-2. Procedure of Stakeholders Analysis**

- (1) List the names of stakeholders.
- (2) Group the stakeholders.
- (3) Identify important stakeholders.
- (4) Analyze the important stakeholders.
- (5) Select a tentative target group.

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**2-2. Procedure of Stakeholders Analysis**

- (2) Group the stakeholders.
- (3) Identify important stakeholders.

Beneficiaries	Implementing Agencies	Policy Makers	Funding Agencies	Collaborating Agencies	Negatively Affected People	Potential Opponents
Villagers	District Agriculture Department	Ministry of Agriculture	Farmers Bank	Donors	Surrounding Villagers	Middlemen
Middlemen	Extension Workers	District Agriculture Department	District Agriculture Department	Research Institute		
	Villagers	Village Chief	Villagers			
	Donors		Donors			

**Contents**

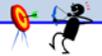
1. Summary of PCM
2. Stakeholders Analysis (Analytical Stage 1)
- 3. Problems Analysis (Analytical Stage 2)**
4. Objectives Analysis (Analytical Stage 3)
5. Project Selection (Planning Stage 1)
6. Project Design Matrix (PDM) (Planning Stage 2)
7. Plan of Operation (Planning Stage 3)

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### 3-1. Purpose of Problems Analysis

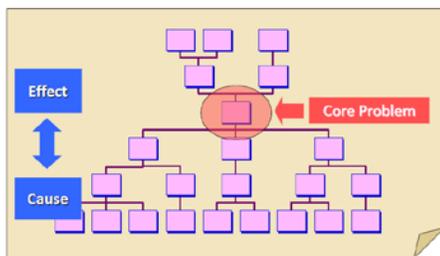
- ◆ To clarify the overall picture of the problems being faced by the tentative target group.
- ◆ To analyze the entire problematic situation based on the logic of "cause-effect" relationship.



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### 3-3. Problems Tree



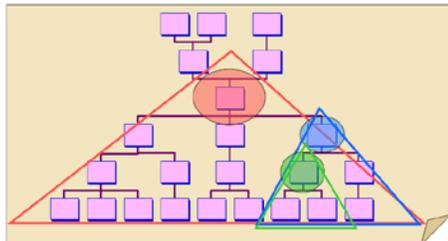
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### 3-5. Core Problem

**Core Problem = A starting point of the analysis**

※ The range of the analysis depends on the selection of the Core Problem



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7. Plan of Operation (Planning Stage 3)



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### 3-2. Procedure of Problems Analysis

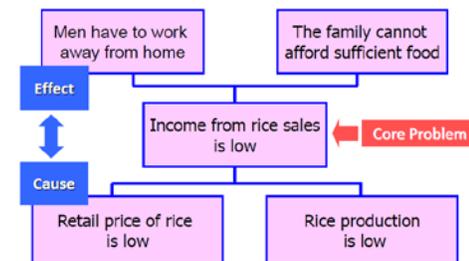
- 1) Write problems of the tentative target group on cards.
- 2) Find cause-effect relations among the problem cards and place them: effect above and cause below.
- 3) **Select the Core Problem.**
- 4) **Identify direct causes to the Core Problem.**
- 5) **Identify relevant causes to direct causes.**
- 6) **Review the Problems Tree.**
- 7) **Identify the effect of the Core Problem.**
- 8) **Complete the Problems Tree.**



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### 3-4. Problems Tree (Example)



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### 3-6. Rule of Card Writing

- (1) Write only existing problems.
- (2) Write only one problem per card.
- (3) Write clear and detailed sentences.
- (4) Do not include cause and effect in one card.
- (5) Avoid expressions such as "Lack of XX" and "No XX."



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### 4-1. Purpose of Objectives Analysis

- ◆ To clarify situations to be realized and means to be taken for them.



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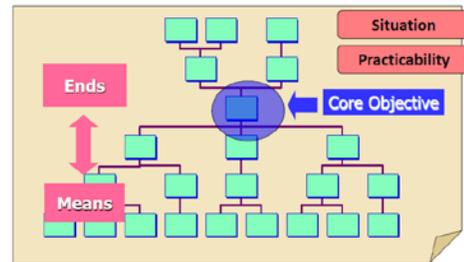
#### 4-2. Procedure of Objectives Analysis

- 1) Rephrase the Core Problem as the Core Objective.
- 2) Rephrase the direct causes as direct means.
- 3) Develop the upper part of the Objectives Tree.
- 4) Rephrase the remaining problem cards.
- 5) Add cards(possible options) if necessary.

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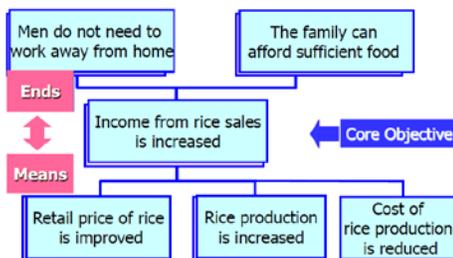
#### 4-3. Objectives Tree



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#### 4-4. Objectives Tree (Example)



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#### 4-5. Rule of Card Writing

- (1) Write situations.
- (2) Think realistically.
- (3) Write in a sentence.
- (4) Add possible options.



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#### 5-1. Purpose of Project Selection

◆ To formulate a basic design of the project based on the previous analysis and the given conditions such as time, budget and resources.



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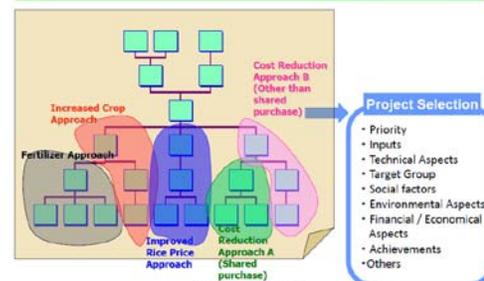
#### 5-2. Procedure of Project Selection

- 1) Confirm the given conditions of the project.
- 2) Identify the approaches.
- 3) Assign a name to each approach.
- 4) Set the criteria to compare approaches.
- 5) Make a comparison table.
- 6) Select one or more approaches.

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#### 5-3. Identification of Approaches



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### 5-4. Comparison of Approaches

	Effect on Core Objective	Cost	* 1 to 4 scale Evaluation	
			Feasibility	Urgency
"x Δ Approach"	4	Low	2	3
"O Δ Approach"	2	Low	3	3
"Δ Δ Approach"	2	High	1	4
"x O Approach"	3	High	4	1
"x x Approach"	2	Low	2	2

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### 6-2. Purpose of developing PDM

- ◆ To design a project with clear image.
- ◆ To express a project by using a common format so that anyone can understand.



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### 6-4. Narrative Summary

**Overall Goal**  
A long-term objective which can be attained 3 to 5 years after the successful completion of the project.

**Project Purpose**  
A final target of a project that must be realized at the end of the project period.

**Outputs**  
Specific achievements of a project which are necessary for the realization of the project purpose.

**Activities**  
Actions which are carried out by a project to realize each output using inputs.

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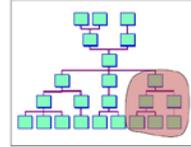


### 5-5. Project Selection to formulation of PDM

How can we plan a project based on the selected approach?



#### Selected Approach



#### PDM

Narrative Summary	Indicators	Means of Verification	Important Assumption
Overall Goal			
Project Purpose			
Outputs			
Activities	Inputs		Pre-Conditions

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### 6-1. What is PDM

- ◆ A master plan of a project.
- ◆ Used as a basic reference for management of a project.



Narrative Summary	Indicators	Means of Verification	Important Assumption
Overall Goal			
Project Purpose			
Outputs			
Activities	Inputs		Pre-Conditions

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### 6-3. Structure of PDM

① Project Title: \_\_\_\_\_ Target Group: \_\_\_\_\_  
 Target Area: \_\_\_\_\_ Project Period: \_\_\_\_\_ Date: \_\_\_\_\_ Version: \_\_\_\_\_

Narrative Summary	Indicators	Means of Verification	Important Assumptions
Overall Goal			
Project Purpose			
Outputs			
Activities	Inputs		Preconditions

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### 6-4. Narrative Summary

How can we reflect the result of objectives analysis?



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### 6-5. Inputs

**Inputs**  
Resources which are necessary for project activities, such as human resources, equipment and budget.

**Example:**

(Donor Side)	(Recipient Side)
- Personnel	- Personnel
- Equipment	- Facilities
- Cost	- Local Cost
- Acceptance of Trainees	

Project Title: \_\_\_\_\_ Target Group: \_\_\_\_\_  
 Target Area: \_\_\_\_\_ Project Period: \_\_\_\_\_ Date: \_\_\_\_\_ Version: \_\_\_\_\_

Narrative Summary	Indicators	Means of Verification	Important Assumptions
Overall Goal			
Project Purpose			
Outputs			
Activities	Inputs		Pre Conditions

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### 6-6. Objectively Verifiable Indicators & Means of Verification

**Example:**

#### Indicator

By October 2010, rice production of XXX village increases 5% from the current.

#### Means of Verification

Agricultural statistics in Y district office

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### 6-6. Objectively Verifiable Indicators & Means of Verification

**Indicator for qualitative objective: How to quantify**

#### ① Rating Basis

e.g. Capacity Assessment

Level	Required Capacity Level
1	Able to understand the instructions.
2	Able to execute the instructions with no mistake.
3	Able to perform the tasks within the scope of work with no guidance.
4	Able to propose, plan, execute, and provide feedback by him/herself within the scope of work.
5	Able to understand his/her tasks in relation to others' and formulate plans and proposals accordingly.

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### 6-7. Important Assumptions & Preconditions

**Important Assumptions**  
Necessary conditions to achieve Outputs, Project Purpose, and the Overall Goal, as well as to maintain the situation of the Overall Goal.

The external factors are considered to be important Assumptions.

- ✓ if the factor affects the project significantly.
- ✓ if the project cannot control the factor.
- ✓ if there is a possibility that the assumption will not be met.

**Preconditions**  
Conditions which are necessary to be fulfilled to start the project.

Project Title: \_\_\_\_\_ Target Group: \_\_\_\_\_  
 Target Area: \_\_\_\_\_ Project Period: \_\_\_\_\_ Date: \_\_\_\_\_ Version: \_\_\_\_\_

Narrative Summary	Indicators	Means of Verification	Important Assumptions
Overall Goal			
Project Purpose			
Outputs			
Activities	Inputs		Preconditions

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### 6-6. Objectively Verifiable Indicators & Means of Verification

**Objectively Verifiable Indicators**  
Indicators and target level to measure the attainment level of Overall Goal. Project Purpose and Outputs

What ?  
Of whom?  
Of where?  
How much?  
How well?  
By when?

Narrative Summary	Indicators	Means of Verification	Important Assumptions
Overall Goal			
Project Purpose			
Outputs			
Activities	Inputs		Pre Conditions

**Means of Verification**  
Source of information on the indicators

- ✓ Data source should be reliable, objective, and easily obtainable.
- ✓ If the project collects data on its own, "data collection" should be added in Activities.
- ✓ Needs to be aware of costs of data collection.

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### 6-6. Objectively Verifiable Indicators & Means of Verification

#### Quantitative Indicator

##### ① Number

- e.g. -Number of trained teachers
- Number of organizations that have begun to plant trees

##### ② Percentage(%)

- e.g. -Percentage of people who had a medical check up
- Percentage of participants who have begun to use contraception

##### ③ Rate

- e.g. -Male-female ratio of primary school enrollment
- Number of doctors per 1,000 residents

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### 6-6. Objectively Verifiable Indicators & Means of Verification

**Indicator for qualitative objective: How to quantify**

#### ② Scoring System

e.g. Scoring the achievement level of "participatory"

- Local government has requested local residents to submit development plan. (all:2, most:1, only a few:0)
- Local residents can participate in the meeting of development plan. (yes:1, no:0)
- The documents of planning process of local administration are distributed. (yes:1, no:0)
- The criteria for selection of development plans submitted by local residents are cleared. (yes:1, no:0)

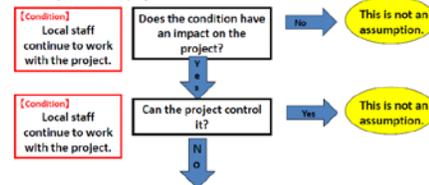
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### 6-7. Important Assumptions & Preconditions

#### 【How to Identify Important Assumptions】

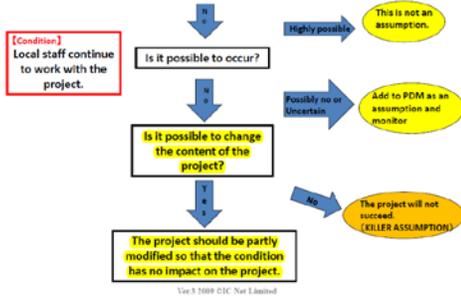
Example: The project title is "Increase the rice production in XXX village". Can the condition, "Local staff continue to work with the project." be an important assumption for this project?



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### 6-7. Important Assumptions & Preconditions



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### 6-8. Reading Structure of PDM

Project Title: \_\_\_\_\_ Target Group: \_\_\_\_\_  
 Target Area: \_\_\_\_\_ Project Period: \_\_\_\_\_ Date: \_\_\_\_\_ Version: \_\_\_\_\_

	Narrative Summary	Indicators	Means of Verification	Important Assumptions
Overall Goal				
Project Purpose				
Outputs				
Activities		Inputs		
				Preconditions

Vertical Logic of PDM

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### 7. Plan of Operation (Planning Stage 3)

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### 7-1. What is Plan of Operation (PO)

◆ A PDM-based detailed operational plan

PO Includes

- ✓ Activities
- ✓ Expected outputs
- ✓ Implementation schedule
- ✓ Inputs
- ✓ Responsible posts

Activities	Section in charge	Expected result	Schedule
			Plan
			Actual
			Plan
			Actual
			Plan
			Actual
			Plan
			Actual

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## APPENDIX 11a: Case 1 - Hygiene practices at the Kingstown Fish Market

### Hygiene practices at the Kingstown fish market "Big Business in Little Tokyo" PDM

**Project Title:** Improved QMS for Enhanced Global Trade of Fish and Fish Products

**Target Group:** National Fisheries Marketing Limited (NFML)

**Term:** 18 months

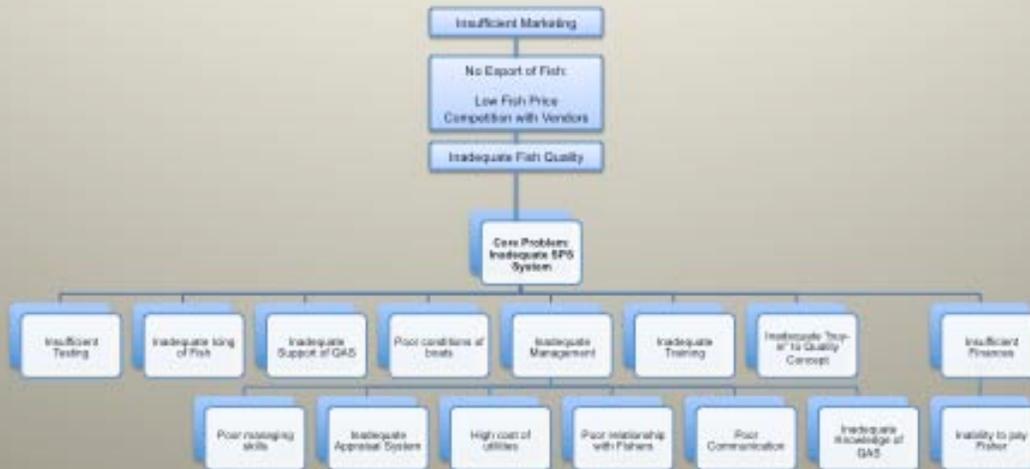
**Overall Goal:** Sustained Supply of Quality Fish and Fish Products for National and International Markets

**Project Goal:** Development of Adequate SPS Capability in NFML

**Output:**

1. Adequate SPS System
2. Adequate Management System
3. Adequate Financing Arrangements

## Hygiene practices at the Kingstown fish market "Big Business in Little Tokyo" Problem Analysis



**Hygiene practices at the Kingstown fish market**  
**"Big Business in Little Tokyo"**  
**PDM**

**Project Title:** Improved QMS for Enhanced Global Trade of Fish and Fish Products

**Target Group:** National Fisheries Marketing Limited (NFML)

**Term:** 18 months

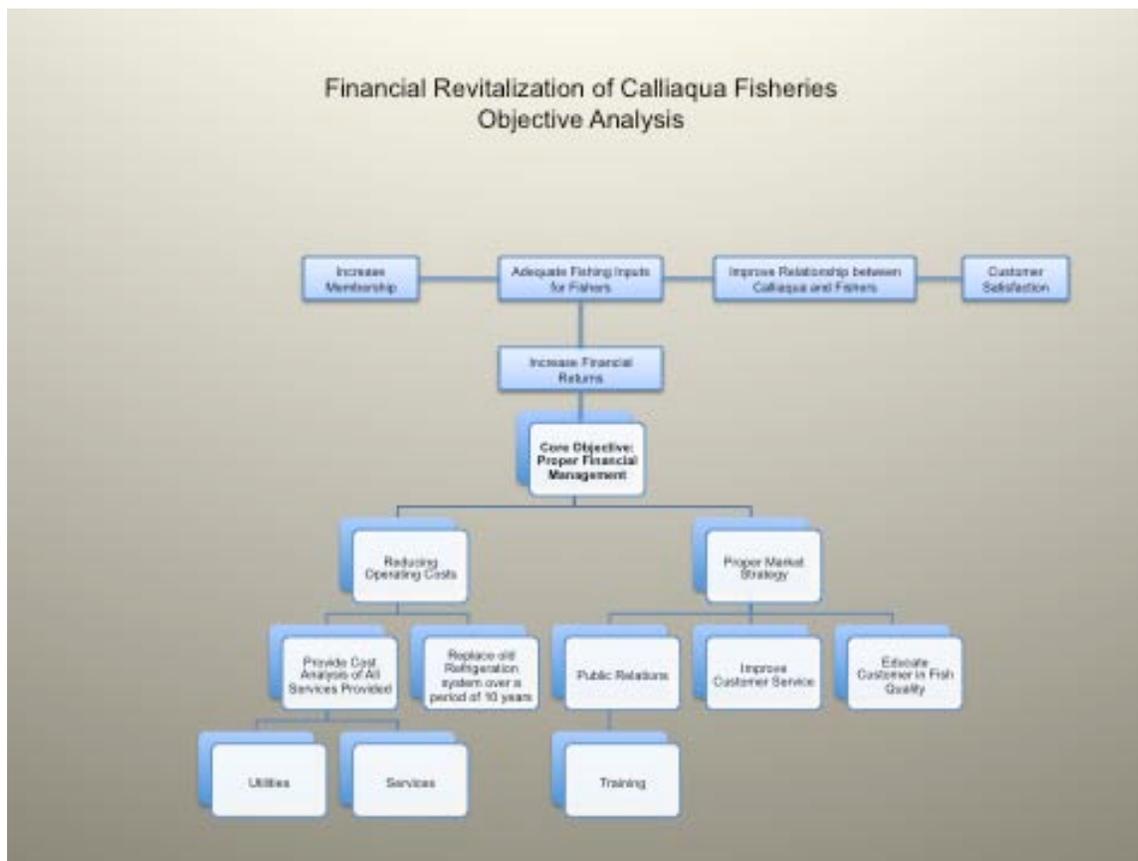
**Overall Goal:** Sustained Supply of Quality Fish and Fish Products for National and International Markets

**Project Goal:** Development of Adequate SPS Capability in NFML

**Output:**

1. Adequate SPS System
2. Adequate Management System
3. Adequate Financing Arrangements

## APPENDIX 11b: Case 2 - Financial Revitalization of Calliaqua Fisheries Facilities



## Financial Revitalization of Calliaqua Fisheries Problem Analysis



Financial Revitalization of Calliaqua Fisheries  
PDM

**Project Name:** Financial Revitalization of Calliaqua Fisheries

**Target Group:** Calliaqua

**Term:** 5 years

**Overall Goal:**

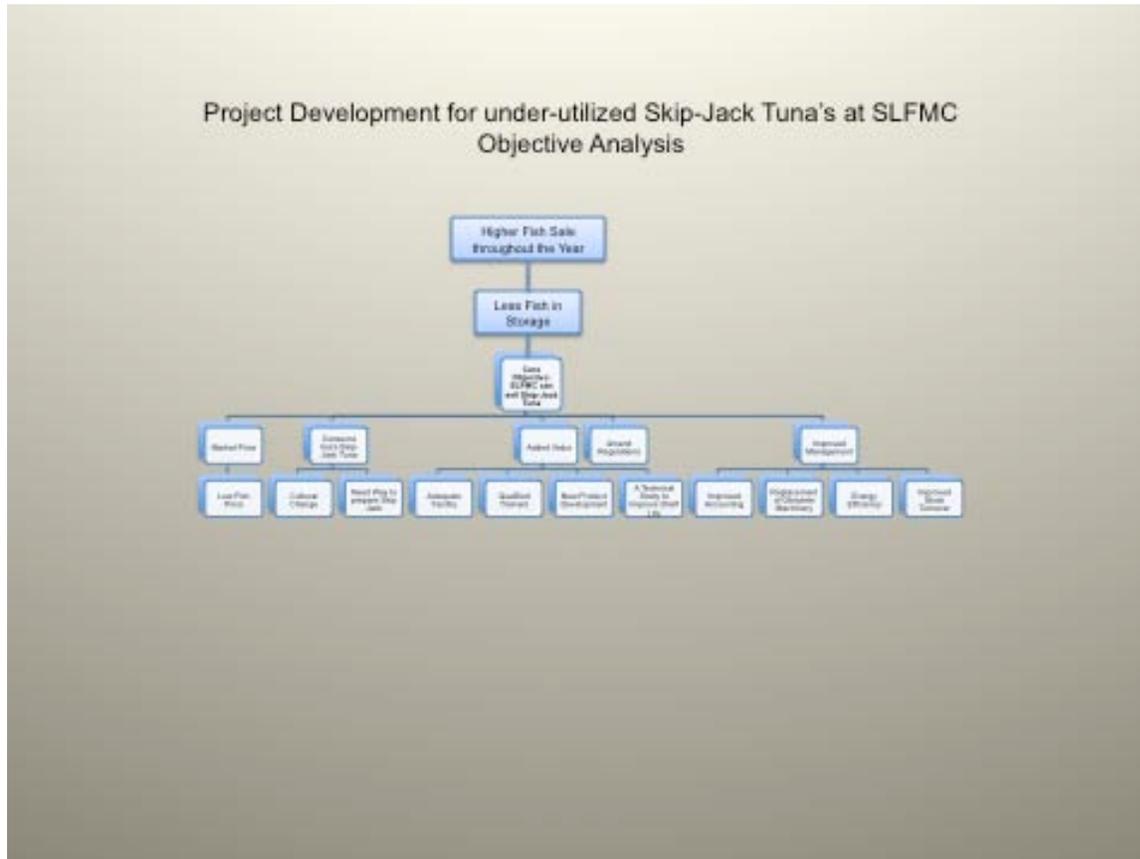
1. Increase Financial returns by 10% over a 3 year period
2. Increase membership by 30% over a 3 year period
3. Boost Customer Relation by Conducting a Survey Before and After

**Project Goal:** Improve the Financial Management of Calliaqua

**Output:**

1. Proper Marketing Strategy
2. Reducing the Operating Cost by Conducting Cost Analysis

## APPENDIX 11c: Case 3 - Project development for under-utilized products at St. Lucia Fish Market Cooperative Limited



## Project Development for under-utilized Skip-Jack Tuna's at SLFMC Problem Analysis



Project Development for under-utilized Skip-Jack Tuna's at SLFMC  
PDM

**Project:** Project Development for under-utilized Skip-Jack Tuna's at SLFMC

**Target Group:** SLFMC

**Term:** 2 years

**Overall Goal:**

1. Adding Value to Skip-Jack Tuna
2. Capacity Building Enhancement of SLFMC for Product Development
3. Marketing Strategy Improvement

**Project Goal:**

1. Increase Sale of Skip-Jack Tuna Year-round
2. Product Diversification to enhance sale and Viability at SLFMC

**Output:**

1. Improved Stock Turnover at SLFMC
2. New Product Development
3. Consumer Appreciation of Skip-Jack Tuna
4. Sustainability of SLFMC

## **APPENDIX 12: Dominica: Newton Fisheries Cooperative**

Newtown Fisheries Cooperative began in 1978. The intention of the cooperative then, was to market the fish caught by the Newtown fishermen. After hurricane David in 1979, many of the fishing boats got damaged, and as such the need to become a full fishing cooperative arose. Newtown Fisheries became a registered cooperative in 1981, and continued to grow and flourish.

They conducted different types of fishing such as, beach seining, tuna long lining (for which they became the first group to do that type of fishing in Dominica), deep sea fishing (flying fish and dolphin), and bottom long lining. The fishing venture was very lucrative and it was through this that they were able to acquire new equipment. They invested in a 65 foot motor vessel which was converted into a trawler. However, maintaining this vessel proved to be very costly, thus, it was sold and two smaller boats were built. In the 1980's Newtown Fisheries Cooperative was thriving with a membership of 65. Some of these members are still around, others have migrated and some have left fishing.

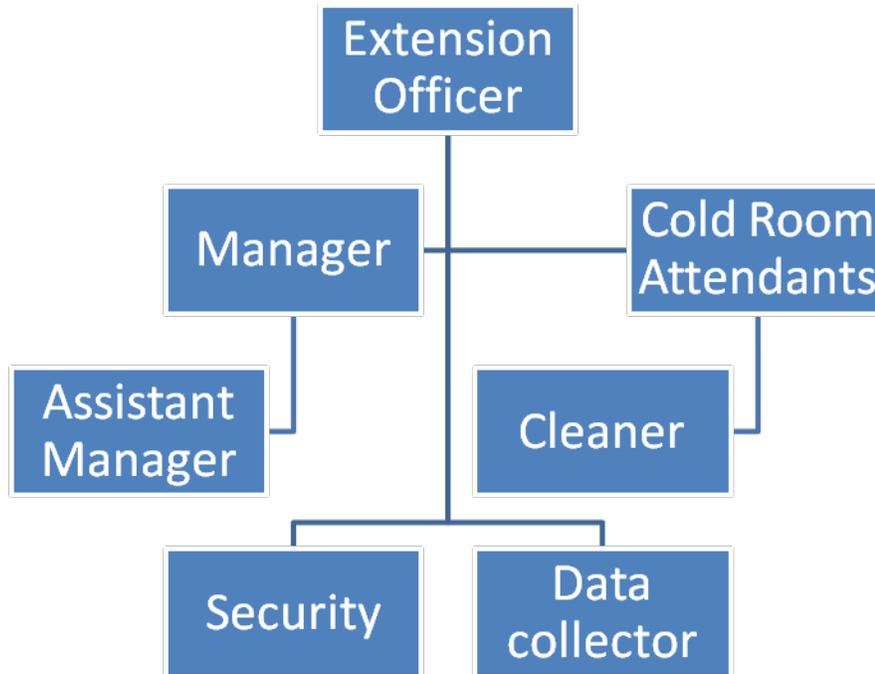
The year 1998 was a turning point for Newtown Fisheries Cooperative. One of the pillars of the cooperative died, which diminished the moral of the members. Then in 1999 hurricane Lenny struck Dominica. Most boats were lost and it became difficult to replace both boats and fishermen, therefore fishing activity became minimal in early 2000 since there seemed to be a shortage of individuals who could do both beach seining and long lining. The older fishermen had either died or retired, younger ones had migrated and those who remained in Dominica did not consider fishing lucrative. Thus, the survival of Newtown Fisheries Cooperative depended on new membership and a fresh approach.

In 2005 Newtown Fisheries Cooperative acquired the use of Roseau Fish Market with the help of Mr. Nigel Lawrence. Newtown Fisheries Cooperative was considered the best Co-op to run the Roseau Fish Market because of its good record. They were to find their own capital to buy fish, but were able to set up Roseau Fish Market. Presently Newtown Fisheries Cooperative operates with a staff of eight and sells a variety of quality fish including Tuna, Dolphin, Marlin, Red fish, Salmon, Kawang, Flying fish, Lobster and Squid. Other products and services are also offered such as crushed ice, bone meal, fish cleaning, packaging, storage and band saw cutting.

Newtown Fisheries Cooperative membership has increased by 35 in 2011 and is still growing.

## APPENDIX 13a: Grenada - Gouyave Fish Market

### Gouyave Fish Market Organizational Chart



This chart represents the organizational structure as it relates to the chain of command for the efficient operations and functions that are carried out in the Gouyave Fish Market.

The role of persons from the above chart.

- Extension Officer overall responsibility is for management of fisheries facilities, staffs and the Fishing Districts and reporting to the Chief Fisheries Officer
- Manager responsibility is for supervision of subordinate staff
- Assistant manager provide support and supervision of members of staff
- Data collectors is responsible for recording of catch and effort data, length frequency and maturity data
- Assistant data collector is involved in the collection of data
- Cold room attendants is responsible for recording, storing and removal of fish entering and leaving the cold room
- Cleaner are responsible for maintaining cleanliness in and around the fish market

This chart represents the organizational structure as it relates to the chain of command for the efficient operations and functions carried out at the Gouyave Fish Market.

**GOUYAVE FISH MARKET**

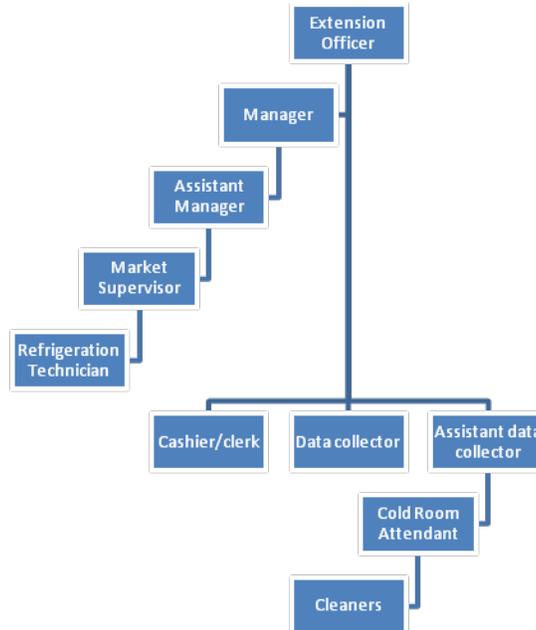
**MARKET REVENUE COLLECTED 2006 – 2011**

<b>REVENUE</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>TOTAL</b>
<b>ICE SOLD</b>	\$	\$ 7,766.70	\$ 30,396.50	\$ 33,258.90	\$ 28,521.00	\$	\$ 99,943.10
<b>LANDING FEES</b>	\$ 6,708.25	\$ 6,134.60	\$ 7,250.55	\$ 7,489.70	\$ 4,453.50	\$ 4,681.80	\$ 36,718.40
<b>STALL RENT</b>	\$ 365.00	\$ 502.75	\$	\$	\$ 841.30	\$	\$ 1,709.05
<b>FISH STORAGE</b>	\$ 7,327.86	\$ 5,349.53	\$ 7,311.88	\$ 9,126.36	\$ 8,573.50	\$ 9,923.40	\$ 46,406.31
<b>LOCKER RENT</b>	\$ 1,240.00	\$ 1,460.00	\$ 120.00	\$ 80.00	\$	\$	\$ 2,900.00
<b>TOTAL</b>	\$ 15,641.11	\$21,213.58	\$ 45,078.93	\$ 49,954.96	\$ 42,389.30	\$ 14,605.20	\$ 188,883.08

.....  
Lisa Chetram  
Fisheries Ext. Officer  
Western District

## APPENDIX 13b: Grenville Fish Market

### Grenville Fish Market Organizational Chart 2012



This chart represents the organizational structure as it relates to the chain of command for the efficient operations and functions carried out at the Grenville Fish Market.

The following characterize a partial role performed by each member of staff at the Grenville fish market.

- Extension Officer overall responsibility is for management of fisheries facilities, staff members and the fishing districts and reporting to the Chief Fisheries Officer
- Manager responsibility is for supervision of subordinate staff
- Assistant manager provide support and supervision of members of staff
- Market supervisor runs the floor and supervise the daily operations
- Refrigeration technician maintenance of refrigeration facilities
- Cashier / Clerk is responsible for collecting government revenue, performing the role of receptionist and engaging in accounting activities and record keeping.
- Data collectors is responsible for recording of catch and effort data, length frequency and maturity data
- Assistant data collectors is involved in the collection of data
- Cold room attendant is responsible for recording, storing and removal of fish entering and leaving the cold room
- Cleaners are responsible for maintaining cleanliness in and around the fish market

## Accounts

Annual revenue collected at Grenville Fish Market in 2011

### Income

Ice sales	\$ 113,759.40
Stall rent	\$ 17,950.00
Lockers rent	\$ 8,625.00
Machine room	\$ 5,000.00
Fish storage	\$ 2,855.65
Fish dues	\$ 1,626.25
Wash room	\$ 415.00
Electricity	\$ 716.00
Water	\$ 158.00
Others	<u>\$ 1,000.00</u>
<b>Total</b>	<b><u>\$ 153,645.30</u></b>

### Expenditure

Salaries	Not / Available
Electricity	N/A
Water	N/A
Telephone	N/A
Internet	N/A
Spear parts	N/A
General maintenance	N/A
Cleaning item	N/A
Stationery	N/A

The unavailability of expenditure records at our disposal makes it difficult if not impossible to calculate the income from the expenditures to realize if there is a profit or a deficit. The system employed now is not recommended and needs to be improved to realize the full potential of the market.



**GRENVILLE FISH MARKET**

**MARKET REVENUE COLLECTED 2006 - 2011**

<b>REVENUE</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>TOTAL</b>
<b>ICE SOLD</b>	\$ 80,030.62	\$135,665.75	\$ 152,191.90	\$ 129,131.30	\$ 123,638.30	\$ 113,759.40	\$ 734,417.27
<b>LANDING FEES</b>	\$ 5,647.20	\$ 10,816.75	\$ 10,464.75	\$ 3,919.12	\$ 2,446.21	\$ 1,626.25	\$ 34,920.28
<b>STALL RENT</b>	\$ 41,417.50	\$ 44,980.50	\$ 48,000.00	\$ 34,355.00	\$ 27,890.00	\$ 17,950.00	\$ 214,593.00
<b>FISH STORAGE</b>	\$ 12,324.52	\$ 12,595.19	\$ 10,308.55	\$ 4,193.45	\$ 4,128.95	\$ 2,855.65	\$ 46,406.31
<b>LOCKER RENT</b>	\$ 4,100.00	\$ 10,175.00	\$ 6,040.00	\$ 5,725.00	\$ 7,075.00	\$ 8,625.00	\$ 41,740.00
<b>CAR PARK</b>				\$ 95.00			\$ 95.00
<b>WASHROOM</b>	\$ 390.00	\$ 1,362.00	\$ 1,748.00	\$ 1,699.00	\$ 992.00	\$ 415.00	\$ 6,606.00
<b>MACHINE ROOM</b>	\$ 5,000.00	\$ 5,500.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 5,000.00	\$ 33,500.00
<b>BIN RENT</b>	\$ 400.00	\$ 595.00	\$ 175.00	\$ 50.00			\$ 1,220.00
<b>ELECTRICITY</b>	\$ 280.00	\$ 500.00	\$ 1,860.00	\$ 405.00	\$ 275.00	\$ 716.00	\$ 4,036.00
<b>CLEANER RENT</b>					\$ 700.00	\$ 1,540.00	\$ 2,240.00
<b>WATER</b>				\$ 80.00	\$ 290.00	\$ 158.00	\$ 528.00
<b>EXCESS CASH</b>					\$ 70.00	\$ 1,000.00	\$ 1,070.00
<b>TOTAL</b>	\$149,589.84	\$222,190.19	\$ 236,788.20	\$ 185,652.87	\$ 173,505.46	\$ 153,645.30	\$ 1,121,371.86

.....  
Francis Calliste  
Fishery Officer

## APPENDIX 14: Nevis: Nevis Fisheries Complex



NEVIS FISHERMEN'S  
MARKETING AND  
SUPPLY CO-OP  
SOCIETY

BUSINESS PLAN

ACTION PLAN FOR NEW FISHERIES COMPLEX

## **EXECUTIVE SUMMARY**

This plan seeks to encapsulate the different component that should be put in place to build effective and productive fisheries Co-operative. As a developing nation, we envision to propel ourselves in a situation that makes is feasible to foster growth, and be competitive on the global market. We also seek to enhance our product base and supplies, and add value to make us more viable. This plan outlines detail aspects such as SALES / BUYING TRENDS, MARKET ANALYSIS, STRATEGY, and IMPLEMETANTION component to bring to bear a project of this magnitude.

## **MARKET**

The market share of this venture is miniscule as it is. Our aim is to grow this sector and capture more market share. It is also futuristic in our planning to draw more capital and investment to our country and region. Presently our market only carter to the national level. As globalization is thrust upon us strategies must be put in place to grow our product. Our present consumption is centered on the local consumption such as Schools, Hotels, Tourist, supermarkets. The productivity level has to be increased to maintain the national demands and capture outside markets.

## **PRODUCT**

Our products are limited in certain aspects. This is mainly due to a number of reasons e.g.(1) small fishing boats which are not equip to target the pelagic species such as Dolphin, tuna that migrate thought our water at different period of year (Nov- May), (2) weather Condition,(3) diversification on fishing method. Efforts would be geared toward adding more variety to encourage more buyers to use the market. The major fish product that are landed at the complex are:

- Dolphin
- Wahoo
- Tuna
- King Fish
- Red Snapper
- Grouper
- Hind and Butter
- Pot fish
- Lobster
- Shell fish
- Conch
- Shark
- Ballahoo

In an effort to foster growth the introduction of the bi- products of the original product is mandatory. These products are geared towards adding value; promote diversification, which can also lead to more profits.

**STRUCTURE**

The structure put in place provides a guideline by which rules and procedures and implementation can be done. As efforts are made to become a part of this new emerging market it is imperative that support comes from the government and ministers in this Department. Capacity building is a must component of this plan for future growth and expansion. As the structure shows there is room for added human resource to function economically and effectively.

**Organizational Chart**



## **STRATEGY**

Strategic planning is essential to any plan, as the strategy used to bring about this feat is of tremendous importance. As aspect of the plan would be implemented to show the long term goal and viability of this sector and product. Considerable effort would be made to involve a wide and diverse cross section of the target market you wish to capture.

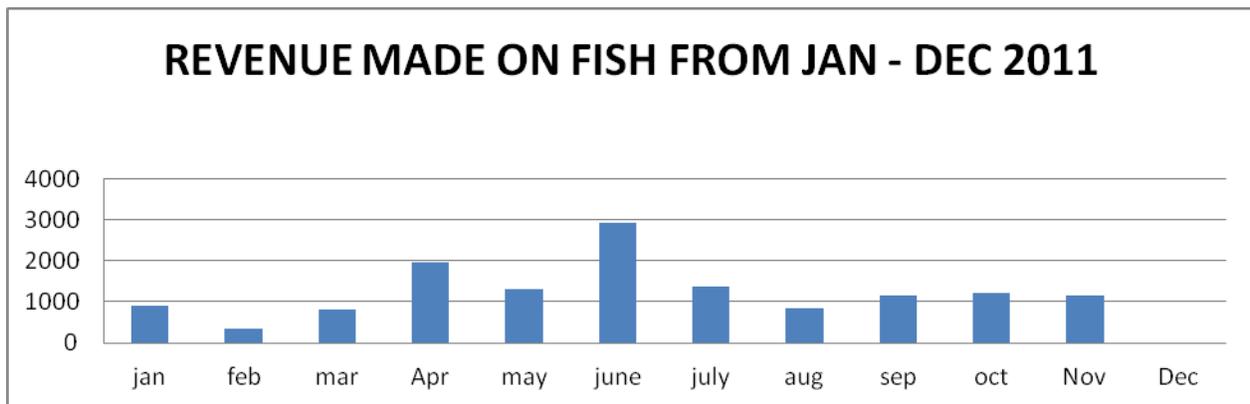
All aspect of the media would be utilized, such as television ads, radio, community calendars, newspaper and brochures. Public awareness is of great importance to get the public aware of the use and need for this business venture.

## **IMPLEMENTATION**

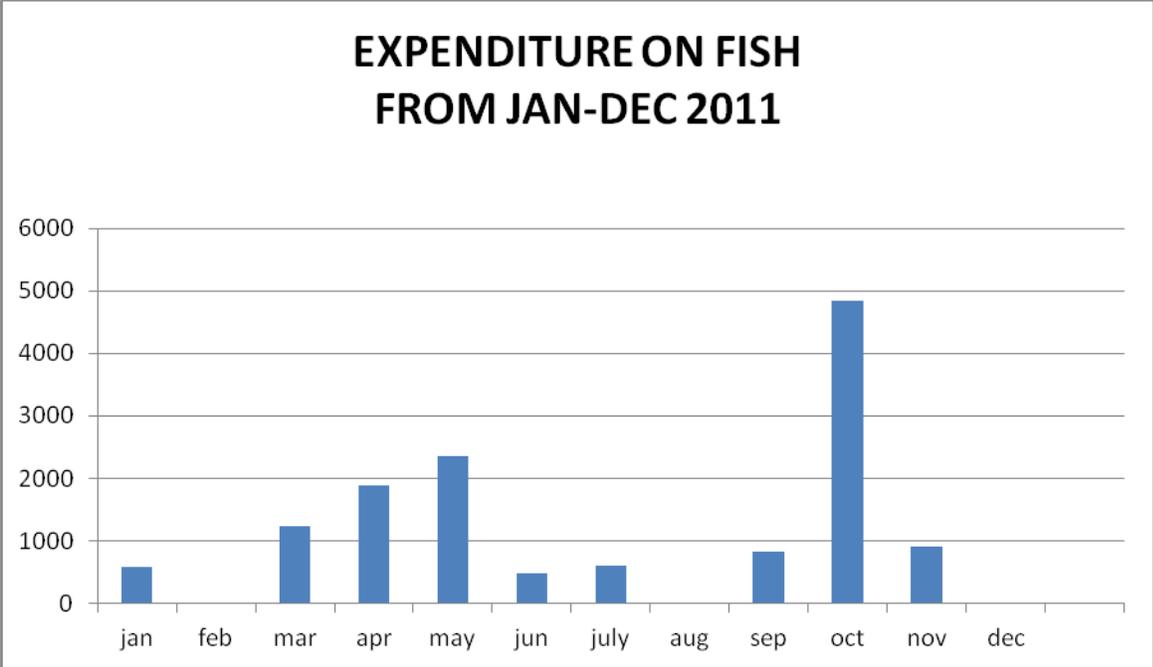
A critical role of the plan is the implementation. Based on the analytical and statistical data provided one must take careful look at the action of such a venture and how to bring about its success. Considerable amount of capital would have to be appropriated by government for this project.

With the global economic situation still volatile, other means of capital have to be realized to get the structure in place. Additional expenditure to maintain and do the operational aspect is very critical. Core capacities should be clearly outlined, a needs assessment along with and EIA (environmental impact assessment) study becomes vital to the successive outcome. All stakeholders should have a vested interest as this project is put in place.

Financial Analysis: INCOME & EXPENDITURE FOR 2011



The graph above captures the revenue made at the Fisheries complex from January to December 2011, where there was a fluctuation between each month. December showing there was no sale made on fish at the complex where June captures the most Revenue.



The graph above captures the expenditure for fish purchase from Jan-Dec 2011 at the fisheries complex where there was no purchase of fish in February, August and December. October showing the most purchase of fish for the year 2011.

## APPENDIX 15a: Anse La Raye Fishing Port





Anse La Raye is a small fishing community on the West Coast of Saint Lucia. It is well known as a small fishing community with about one hundred and twenty {120} registered full-time and part-time fishers and about twenty five {25} registered fishing vessels, eight {8} canoes and seventeen {17} pirogues. Over the years fishers venture out at sea in the traditional dugout canoes but are steadily moving into the more modern and stable fibre glass reinforced pirogues. Their main fishing activities include beach seine, fillet, gill nets, flying fish and trolling an activity which is frequently conducted near Fish Aggregating Devices {FADs}.

Fibre-glass reinforced Pirogue



## Traditional dugout canoe



Move from the traditional dugout canoes to more stable and modern fibre-glass reinforced pirog

In 2009 the Government of Japan and Saint Lucia constructed a fishing port facility in the fishing community of Anse La Raye, this facility encompasses:-

1. Administrative Building with :-
  - Offices – Fisheries and Cooperative
  - Tackle shop
  - Meeting area
  - Store room space
  - Ice making machine and small processing area
2. Thirty {30} gear locker rooms
3. Jetty
4. Wench. Net, boat and gear repair shed

The facility is managed by the Anse La Raye / Canaries Fishers and Consumers Co-operative Society, with a membership of ninety three {93}, and established on 30<sup>th</sup> November 1976.

5. Refurbishment of vendors arcade managed by Anse La Raye Village Council
  - These were for a direct result for diversification of fishers income
  - Stimulate tourism activities in the village
  - To boost fishers and their families livelihood with their Fish Fry activities

## Constraints / challenges

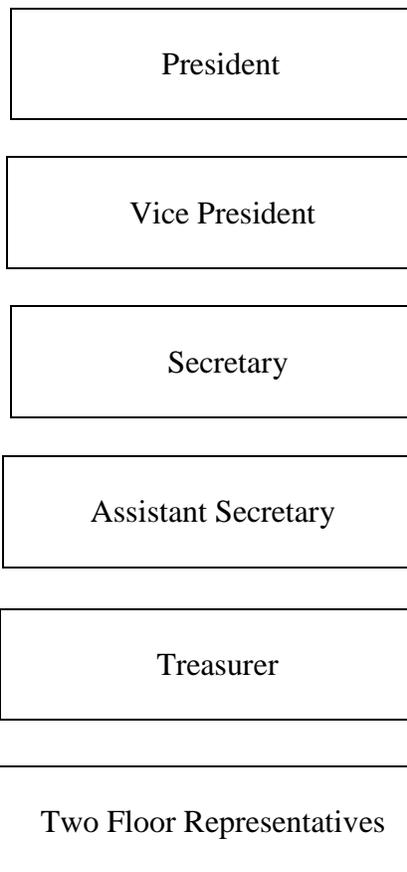
- Interim care taker board
- Access to finance

The Department of Fisheries and Co-operatives are working together with the interim board and general membership to regularize the status, functions and operations of the co-operative. A proposed annual general meeting is scheduled for March 2012.

However, all registered fishers co-operative is Saint Lucia operates under similar guidelines as prescribe by the Co-operative Act.

1. Board of Directors – elected by general membership
2. Conduct annual general meeting

### **Organisation Chart**





Fishing community of Anse La Raye

Petronila Polius

Department of Fisheries

Ministry of Agriculture, Food Production, Fisheries and Rural Development

14 February 2012

## APPENDIX 15b: St. Lucia - Choiseul Fisherman's Cooperative

### CHOISEUL FISHERMEN'S CO-OPERATIVE SOCIETY

The Choiseul Fishermen's Co-operative Society was registered on the 23<sup>rd</sup> of March 1972. It started with 22 members. At that time one was required to pay \$5.00 for registration and \$100.00 for minimum shares.

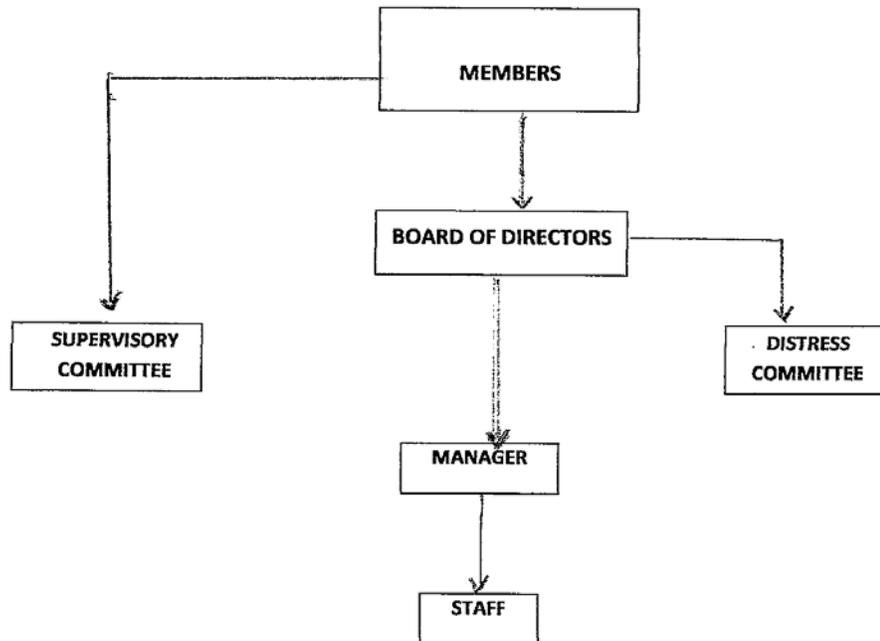
At present, there are 92 members \$25.00 for registration and a minimum Share of \$265.00.

The Co-operative operates an Ice Machine and a limited amount of ice is given to Fishermen to go to sea especially for storage of the fresh bait.

Ice is also sold to the Community in helping for payment of the electricity bills and maintenance of this machine.

A Fuel Pump is also being operated with both Diesel and Gasoline. There is a retail shop that sells Fishing Gears and Equipment to its members.

**ORGANISATIONAL CHART FOR THE CHOISEUL FISHERMEN'S  
CO-OPERATIVE SOCIETY**



**SR**

CHOISEUL FISHERMEN'S COOPERATIVE SOCIETY LIMITED

Auditor's Report

Financial Statements

31st. December, 2010



**SARJ**

**RAMDHARRI**

CHARTERED ACCOUNTANT

P. O. Box 1976, Chase Gardens  
Castries, St. Lucia, W.I.

Tel/Fax:- (758) 451 - 7268

CHOISEUL FISHERMEN'S COOPERATIVE SOCIETY LIMITED

Financial Statements

For the year ended 31st. December, 2010  
(With comparative figures for 2009)

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Statement of Changes in Financial Position	4
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Schedule of Administration, Selling and General Expenses	9
Trading Account	10

AUDITOR'S REPORT TO THE MEMBERS OF  
CHOISEUL FISHERMEN'S COOPERATIVE SOCIETY LIMITED

I have audited the accompanying BALANCE SHEET of CHOISEUL FISHERMEN'S COOPERATIVE SOCIETY LIMITED as at 31st. December, 2010, and the statements of INCOME AND UNDISTRIBUTED SURPLUS and CHANGES IN FINANCIAL POSITION for the year then ended.

These Financial Statements are the responsibility of the Society's Committee of Management. My responsibility is to express an opinion on the Financial Statements based on my audit.

I conducted my audit in accordance with generally accepted auditing standards. Those standards require that I plan and perform the audit to obtain reasonable assurance about whether the Financial Statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the Financial Statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall Financial Statement presentation.

In my opinion the Financial Statements referred to above present fairly, in all material respects, the financial position of CHOISEUL FISHERMEN'S COOPERATIVE SOCIETY LIMITED at 31st. December, 2010, and the results of its operations for the year then ended in conformity with international accounting standards.

2<sup>nd</sup>. April, 2011

Castries,  
St. Lucia.

  
Chartered Accountant

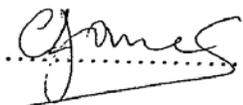
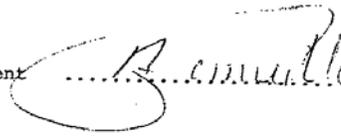
CHOISEUL FISHERMEN'S COOPERATIVE SOCIETY LIMITED

Balance Sheet

As at 31st. December, 2010  
(with comparative figures for 2009)

	Notes	2010	EC\$ 2009
		-----	-----
<b>CURRENT ASSETS:</b>			
Cash in hand & at bank	3	329,539	286,221
Accounts Receivable	2 & 3	240,289	161,973
Advance Payments		155	155
Inventories	2	120,776	172,343
<b>Total Current Assets</b>		<b>690,759</b>	<b>620,692</b>
<b>LESS CURRENT LIABILITIES:</b>			
Accounts Payable & Accruals	4	4,200	4,200
<b>Total Current Liabilities</b>		<b>4,200</b>	<b>4,200</b>
<b>WORKING CAPITAL</b>		<b>686,559</b>	<b>616,492</b>
<b>FIXED ASSETS - NET</b>	2 & 3	<b>664</b>	<b>1,703</b>
<b>INVESTMENT</b>	5	<b>100</b>	<b>100</b>
<b>NET ASSETS</b>		<b>687,323</b>	<b>618,295</b>
<b>REPRESENTED BY:</b>			
Members' Equity:			
Share Capital	6	110,125	103,571
Statutory Reserves	7	174,010	159,419
Education Fund	8	54,138	48,314
Distress Fund	9	160,295	146,262
Death Fund	10	34,925	32,683
Contributed Capital	11	8,500	8,500
Retained Surplus		145,330	119,526
<b>TOTAL MEMBERS EQUITY</b>		<b>687,323</b>	<b>618,295</b>

Approved on behalf of the Society:


 ..... President .....
 
 ..... Secretary

The accompanying notes form an integral part of these financial statements

CHOISEUL FISHERMEN'S COOPERATIVE SOCIETY LIMITED

Statement of Income and Undistributed Surplus

For the year ended 31st. December, 2010  
(With comparative figures for 2009)

	2010	EC\$ 2009
	-----	-----
INCOME:-		
SALES	2,257,575	1,966,500
	-----	-----
LESS COST OF SALES:		
Opening Inventories	172,343	111,378
Add: Purchases	1,969,917	1,825,841
	-----	-----
Goods available for sale	2,142,260	1,937,219
Less: Closing Inventories	(120,776)	(172,343)
	-----	-----
Cost of goods sold	2,021,484	1,764,876
	-----	-----
GROSS INCOME	236,091	201,624
OTHER INCOME		
Interest Earned	7,977	8,656
Locker Room Rental	9,447	1,255
Ice	32,834	28,737
Other	1,776	1,261
	-----	-----
Total Other Income	52,034	39,909
	-----	-----
TOTAL INCOME	288,125	241,533
LESS: ADMINISTRATION, SELLING & GENERAL EXPENSES (Schedule 1)	(215,321)	(203,961)
	-----	-----
NET INCOME BEFORE APPROPRIATIONS	72,804	37,572
Transfer to Statutory Reserves (20%)	(14,561)	(7,514)
Transfer to Education Fund (10%)	(5,824)	(3,006)
Transfer to Death Fund (10%)	(5,242)	(2,705)
	-----	-----
NET INCOME/(LOSS) AFTER APPROPRIATIONS	47,177	24,347
RETAINED SURPLUS BROUGHT FORWARD	119,526	95,179
	-----	-----
Dividends	166,703	119,526
Patronage Refund	(2,059)	-
	(19,314)	-
	-----	-----
RETAINED SURPLUS CARRIED FORWARD	145,330	119,526
	=====	=====

The accompanying notes form an integral part of these financial statements

CHOISEUL FISHERMEN'S COOPERATIVE SOCIETY LIMITED

Statement of Changes in Financial Position

For the year ended 31st. December, 2010  
(With comparative figures for 2009)

	2010	EC\$ 2009
	-----	-----
CASH FLOW FROM OPERATING ACTIVITIES:		
Net Income before appropriations	72,804	37,572
Items not affecting cash:		
Depreciation	1,039	1,038
	-----	-----
	73,843	38,610
Decrease in Accounts Payable	-	(38,630)
(Increase)/Decrease in Accounts Receivable	(78,316)	7,133
Decrease/(Increase) in Inventories	51,567	(60,965)
Entrance Fees	30	10
	-----	-----
Cash from/(used in) operations	47,124	(53,842)
	-----	-----
CASH FROM FINANCING ACTIVITIES:		
Increase in Share Capital	6,554	911
Increase in Distress Fund	14,013	3,799
Dividends Paid	(2,059)	-
Patronage Refund	(19,314)	-
Death Fund Payments	(3,000)	-
	-----	-----
	(3,806)	4,710
	-----	-----
Increase/(Decrease) in Cash Balances	43,318	(49,132)
NET CASH BALANCE AT BEGINNING OF YEAR	286,221	335,353
	-----	-----
NET CASH BALANCE AT END OF YEAR	329,539	286,221
	=====	=====
CASH BALANCES COMPRISE:		
Cash in Hand	10,413	9,603
Cash at Bank / Credit Union:		
Bank of St. Lucia Ltd. - Current a/c	24,881	30,549
Bank of St. Lucia Ltd. - Distress a/c	100,317	60,822
Choiseul Co-operative		
Credit Union Limited - Deposit a/c	52,254	49,925
- Shares a/c	141,674	135,322
	-----	-----
	329,539	286,221
	=====	=====

The accompanying notes form an integral part of these financial statements

CHOISEUL FISHERMEN'S COOPERATIVE SOCIETY LIMITED

Notes to the Financial Statements

For the year ended 31st. December, 2010  
(With comparative figures for 2009)

1. INCORPORATION AND PRINCIPAL ACTIVITY

The Choiseul Fishermen's Cooperative Society Limited was incorporated on 22nd. March, 1972, and was continued under the "Cooperative Societies Act 28 of 1999" and the "Cooperative Societies Regulations 1999" of St. Lucia.

Its principal activity is to make available regular supplies of fuel, oil and fishing equipment to its members.

2. SIGNIFICANT ACCOUNTING POLICIES

a) Accounts Receivable:

All debts outstanding at year end were reviewed and allowances have been made for doubtful accounts.

b) Inventories:

Inventories are valued at the lower of cost (on a specific item basis) and net realizable value.

c) Fixed Assets - Net:

Fixed assets are valued at cost less accumulated depreciation thereon. Depreciation is provided over the estimated useful life of depreciable assets on the straight line basis at the following rates:

Building	-	10%
Furniture & Equipment	-	12 1/2%
Petrol Tank Encasement	-	10%
Computer Equipment	-	25%

Maintenance and repairs are charged to current operations whereas the cost of improvements are capitalized. The cost of property, furniture and equipment replaced, retired or otherwise disposed of during the year and the accumulated depreciation thereon are eliminated from the accounts and any resulting gain or loss reflected in current operations.



CHOISEUL FISHERMEN'S COOPERATIVE SOCIETY LIMITED

Notes to the Financial Statements

For the year ended 31st. December, 2010  
(With comparative figures for 2009)

5. INVESTMENT

Investment is stated at cost and represents twenty (20) shares at \$5.00 each in the National Association of Fishermen's Cooperative Society Limited.

6. SHARE CAPITAL

The Society by its Constitution encourages members to increase their share holding by ensuring that members contribute ten percent (10%) of their duty refunds to share capital.

7. STATUTORY RESERVES

	EC\$	
	2010	2009
	----	----
Opening Balance at 1.1.10	159,419	151,895
Add: Appropriation of Net Income	14,561	7,514
Entrance Fees	30	10
	-----	-----
Closing Balance at 31.12.10	174,010	159,419
	=====	=====

In accordance with the Bye-Laws of the Society 20% of the Net Income for the year, plus the entrance fees, have been transferred to a Statutory Reserve fund.

8. EDUCATION FUND

	EC\$	
	2010	2009
	----	----
Opening Balance at 1.1.10	48,314	45,308
Add: Appropriation of Net Income	5,824	3,006
	-----	-----
Closing Balance at 31.12.10	54,138	48,314
	=====	=====

The Education Fund represents an appropriation of ten percent (10%) of net income after a transfer of 20% to the statutory reserve fund.

CHOISEUL FISHERMEN'S COOPERATIVE SOCIETY LIMITED

Notes to the Financial Statements

For the year ended 31st. December, 2010  
(With comparative figures for 2009)

9. DISTRESS FUND - \$160,295

This amount represents a proportion of import duty refunded by the Government of St. Lucia on fuel purchased by the members of the Society. This fund was set up to assist members in the event of distress or misfortunes.

10. DEATH FUND

	2010	EC\$ 2009
	-----	-----
Opening Balance at 1.1.10		
Add: Appropriation of Net Income	32,683	29,978
Less: Death Benefit Payments	5,242	2,705
	3,000	-
	-----	-----
Closing Balance at 31.12.10	34,925	32,683
	=====	=====

The Death Fund represents an appropriation of ten percent (10%) of net income after the transfers to statutory reserve and education fund.

11. CONTRIBUTED CAPITAL - EC\$8,500

This amount represents a donation from the Cooperative Department and Fisheries Department toward the cost of two computers.

CHOISEUL FISHERMEN'S COOPERATIVE SOCIETY LIMITED

Schedule of Administration, Selling and General Expenses  
For the year ended 31st. December, 2010  
(With comparative figures for 2009)

	<u>Schedule 1</u>	
	EC\$	
	2010	2009
	-----	-----
<u>Staff Expenses</u>		
Salaries and Wages	86,278	80,758
National Insurance Contributions	4,368	3,250
Staff Uniforms	364	-
	-----	-----
	91,030	84,008
	-----	-----
<u>Traveling &amp; Entertainment</u>		
Transportation	871	830
Traveling	570	1,265
Entertainment	1,008	789
	-----	-----
	2,449	2,884
	-----	-----
<u>Office &amp; General Expenses</u>		
Stationery & Office Supplies	8,264	7,410
Electricity	51,905	44,944
Water	32,220	23,060
Telephone	5,994	4,520
Bank Charges	427	588
License	200	200
Audit Fees	4,400	4,400
Depreciation	1,039	1,038
Repairs & Maintenance	4,521	10,897
Sundry Expenses	25	171
Cash Shortages	931	6,523
Garbage Disposal	1,200	1,550
Board Members' Allowance	810	1,960
Honorarium	1,900	-
Donation	275	50
Fishermen's Feast	2,523	3,892
Fisher folk Contribution	-	1,125
AGM Expenses	1,274	500
Toiletries	780	653
Bad Debts	1,304	3,588
Legal Fees	1,850	-
	-----	-----
	121,842	117,069
	-----	-----
Total Admin., Selling & General Expenses	215,321	203,961
	=====	=====

CHOISEUL FISHERMEN'S COOPERATIVE SOCIETY LIMITED

Trading Account

For the year ended 31st. December, 2010

	GAS	DIESEL	OIL	COOKING GAS	TACKLES	PARTS
	-----	-----	-----	-----	-----	-----
	\$	\$	\$	\$	\$	\$
SALES	1,401,025	269,254	117,760	80,349	361,724	20,342
	-----	-----	-----	-----	-----	-----
LESS: COST OF SALES:						
Opening inventory	8,420	17,092	3,521	855	128,578	13,436
Add: Purchases	1,285,024	239,880	91,666	74,412	256,624	17,454
	-----	-----	-----	-----	-----	-----
Less: Closing inventory	(13,208)	(8,255)	(9,500)	(848)	(75,280)	(13,685)
	-----	-----	-----	-----	-----	-----
Cost of goods sold	1,280,236	248,717	85,687	74,419	309,922	17,205
	-----	-----	-----	-----	-----	-----
GROSS PROFIT	120,789	20,537	32,073	5,930	51,802	3,137
	=====	=====	=====	=====	=====	=====

	Phone cards	Drinks
	-----	-----
	\$	\$
SALES	4,862	2,259
	-----	-----
LESS: COST OF SALES:		
Opening inventory	441	-
Purchases	3,075	1,782
	-----	-----
Cost of Goods Sold	3,516	1,782
	-----	-----
GROSS PROFIT	1,346	477
	=====	=====