



ISSN: 1995-1132

CRFM Technical & Advisory Document Series  
Number 2014 / 6

---

## REPORT OF FISHERIES SEMINAR SERIES FOR JAPAN-CARICOM FRIENDSHIP YEAR 2014



---

CRFM Secretariat  
Belize 2014



## **CRFM Technical & Advisory Document - Number 2014 / 6**

### **Report of Fisheries Seminar Series for Japan-CARICOM Friendship Year 2014**

*For further information and to download this report  
please visit us at:*

[www.crfm.int](http://www.crfm.int)

[www.youtube.com/TheCRFM](http://www.youtube.com/TheCRFM)

[www.facebook.com/CarFisheries](http://www.facebook.com/CarFisheries)

[www.twitter.com/CaribFisheries](http://www.twitter.com/CaribFisheries)

## **CRFM TECHNICAL & ADVISORY DOCUMENT – Number 2014 / 6**

### **Report of Fisheries Seminar Series for Japan-CARICOM Friendship Year 2014**

© *CRFM* 2014

All rights reserved.

Reproduction, dissemination and use of material in this publication for educational or noncommercial purposes are authorized without prior written permission of the CRFM, provided the source is fully acknowledged. No part of this publication may be reproduced, disseminated or used for any commercial purposes or resold without the prior written permission of the CRFM.

Correct Citation:

CRFM, 2014. Report of Fisheries Seminar Series for Japan-CARICOM Friendship Year 2014. CRFM Technical & Advisory Document, No. 2014/ 6. 60p.

**ISSN: 1995-1132**

**ISBN: 978-976-8257-04-8**

Published by the Caribbean Regional Fisheries Mechanism Secretariat,  
Belize and St. Vincent and the Grenadines.

|  |
|--|
| This document has been funded with financial assistance of the Japan International Cooperation Agency (JICA) |
|--|

## **LIST OF ACRONYMS AND ABBREVIATIONS**

|                  |   |
|------------------|---|
| <b>ACP</b>       | African, Caribbean and Pacific states   |
| <b>AKF</b>       | Agriculture Credit Fund   |
| <b>BARNUFO</b>   | Barbados National Union of Fisherfolk Organizations                             |
| <b>BFTC</b>      | Basic Fisherman's Training Course   |
| <b>BLF</b>       | Blackfin Tuna   |
| <b>BRD</b>       | Bycatch Reduction Device  |
| <b>CANARI</b>    | Caribbean Natural Resources Institute   |
| <b>CARICOM</b>   | Caribbean Community   |
| <b>CARIFICO</b>  | Caribbean Fisheries Co-management project                                       |
| <b>CERMES</b>    | Centre for Resource Management and Environmental Studies                        |
| <b>CFO</b>       | Chief Fisheries Officer   |
| <b>CFP</b>       | Common Fisheries Policy   |
| <b>CFRAMP</b>    | CARICOM Fisheries Resource Assessment and Management Programme                  |
| <b>CFTDI</b>     | Caribbean Fisheries Training and Development Institute                          |
| <b>CITES</b>     | Convention on International Trade in Endangered Species of Wild Fauna and Flora |
| <b>CMI</b>       | Caribbean Maritime Institute  |
| <b>CNFO</b>      | Caribbean Network of Fisherfolk Organizations                                   |
| <b>COFI</b>      | Committee on Fisheries (FAO)  |
| <b>COTED</b>     | Council for Trade and Economic Development                                      |
| <b>CPUE</b>      | Catch Per Unit Effort   |
| <b>CRFM</b>      | Caribbean Regional Fisheries Mechanism  |
| <b>EAF</b>       | Ecosystem Approach to Fisheries   |
| <b>EEZ</b>       | Exclusive Economic Zone   |
| <b>EIA</b>       | Environmental Impact Assessment   |
| <b>EU</b>        | European Union  |
| <b>FAD</b>       | Fish Aggregating Device   |
| <b>FAO</b>       | Food and Agriculture Organization of the United Nations                         |
| <b>FCR</b>       | Feed Conversion Ratios  |
| <b>FDA</b>       | Food and Drug Administration  |
| <b>GCFI</b>      | Gulf and Caribbean Fisheries Institute  |
| <b>GPS</b>       | Global Positioning System   |
| <b>HACCP</b>     | Hazard Analysis and Critical Control Points                                     |
| <b>ICCAT</b>     | International Commission for the Conservation of Atlantic Tunas                 |
| <b>ICT</b>       | Information and Communications Technology                                       |
| <b>IFREMER</b>   | Institut français de Recherche pour l'exploitation de la mer                    |
| <b>IICA</b>      | Inter-American Institute for Cooperation in Agriculture                         |
| <b>IUU</b>       | Illegal, Unreported and Unregulated fishing                                     |
| <b>IWC</b>       | International Whaling Commission  |
| <b>JAMARC</b>    | Japan Marine Resource Research Center   |
| <b>JICA</b>      | Japan International Cooperation Agency  |
| <b>JOCV-SV</b>   | Japanese Overseas Cooperation Volunteers / Senior Volunteer Program             |
| <b>MAGDELESA</b> | Moored fish AGgregating DEvice in the LEsser Antilles                           |
| <b>NFO</b>       | National Fisherfolk Organization  |
| <b>NGO</b>       | Non Governmental Organization   |
| <b>NJCC</b>      | National Joint Coordinating Committee   |
| <b>ODA</b>       | Official Development Assistance   |
| <b>PWG</b>       | Pelagic Fisheries Working Group   |

|               |   |
|---------------|---|
| <b>RTCPP</b>  | Regional Technical Co-operation Promotion Programme |
| <b>SIDS</b>   | Small Island Developing States                      |
| <b>SSF</b>    | Small Scale Fisheries                               |
| <b>TCP</b>    | Technical Cooperation Project                       |
| <b>THA</b>    | Tobago House of Assembly                            |
| <b>TT</b>     | Trinidad and Tobago                                 |
| <b>US-ESA</b> | United States Endangered Species Act                |
| <b>UWI</b>    | University of the West Indies                       |
| <b>VMS</b>    | Vessel Monitoring System                            |
| <b>WECAFC</b> | Western Central Atlantic Fishery Commission         |
| <b>WTO</b>    | World Trade Organization                            |

## CONTENTS

|   |           |
|---|-----------|
| <b>PART I – REPORT OF REGIONAL SEMINAR.....</b>   | <b>1</b>  |
| INTRODUCTION .....  | 2         |
| ITEM 1: OPENING CEREMONY .....  | 2         |
| ITEM 2: HIGHLIGHTS OF 20 YEARS OF CARICOM-JAPAN COOPERATION IN FISHERIES .....  | 4         |
| ITEM 3: REVIEW OF JAPAN FISHERIES PROJECTS: NATIONAL/BILATERAL EXPERIENCES.....   | 5         |
| 3.1 <i>Belize Seminar Report</i> .....  | 5         |
| 3.2 <i>St. Kitts and Nevis Seminar Report</i> .....   | 6         |
| 3.3 <i>Suriname Seminar Report</i> .....  | 6         |
| 3.4 <i>St. Vincent and the Grenadines Seminar Report</i> .....  | 7         |
| 3.5 <i>Jamaica Seminar Report</i> .....   | 8         |
| 3.6 <i>Dominica Seminar Report</i> .....  | 9         |
| ITEM 4: REVIEW OF JAPAN FISHERIES PROJECTS: CARICOM-WIDE EXPERIENCES .....  | 10        |
| 4.1 <i>Grant Aid Cooperation</i> .....  | 10        |
| 4.2 <i>Cooperation with the Caribbean Fisheries Training and Development Institute (CFTDI)</i> .....  | 10        |
| 4.3 <i>Cooperation with the CRFM – Master Plan Study</i> .....  | 11        |
| 4.4 <i>Technical Cooperation (training and capacity building)</i> .....   | 12        |
| 4.5 <i>Cooperation with the CRFM – CARIFICO Project</i> .....   | 12        |
| ITEM 5: SCOPE FOR NEW INTERVENTIONS – EMERGING AND FUTURE ISSUES, AND PRIORITY AREAS CONSISTENT WITH THE CARIBBEAN COMMUNITY COMMON FISHERIES POLICY AND THE CARICOM STRATEGIC PLAN ..... | 13        |
| ITEM 6: THE WAY FORWARD. ....   | 15        |
| ITEM 7: WORKSHOP CLOSURE .....  | 15        |
| APPENDIX 1: AGENDA.....   | 16        |
| APPENDIX 2: LIST OF PARTICIPANTS .....  | 19        |
| APPENDIX 3, ANNEX A: ADDRESS BY THE EXECUTIVE DIRECTOR, CRFM SECRETARIAT, MR. MILTON HAUGHTON .   | 24        |
| APPENDIX 3, ANNEX B: ADDRESS BY THE AMBASSADOR IN THE EMBASSY OF JAPAN IN TRINIDAD AND TOBAGO, MR. YOSHIMASA TEZUKA. ....   | 27        |
| APPENDIX 3, ANNEX C: ADDRESS BY THE HON. JAIRAM SEEMUNGAL, MINISTER OF LAND AND MARINE RESOURCES, TRINIDAD AND TOBAGO .....   | 28        |
| APPENDIX 4: STATEMENT BY THE CRFM / CARICOM–JAPAN FRIENDSHIP YEAR REGIONAL FISHERIES WORKSHOP, PORT OF SPAIN, TRINIDAD AND TOBAGO, 04 DECEMBER 2014.....                                  | 32        |
| <b>PART II – REPORTS OF NATIONAL SEMINARS .....</b>   | <b>37</b> |
| JAPAN-CARICOM FRIENDSHIP YEAR CELEBRATORY SEMINAR: BELIZE.....  | 38        |
| JAPAN-CARICOM FRIENDSHIP YEAR CELEBRATORY SEMINAR: ST. KITTS AND NEVIS .....  | 40        |
| JAPAN-CARICOM FRIENDSHIP YEAR CELEBRATORY SEMINAR: SURINAME .....   | 44        |
| JAPAN-CARICOM FRIENDSHIP YEAR CELEBRATORY SEMINAR: ST. VINCENT AND THE GRENADINES .....   | 48        |
| JAPAN-CARICOM FRIENDSHIP YEAR CELEBRATORY SEMINAR: DOMINICA .....   | 51        |
| JAPAN-CARICOM FRIENDSHIP YEAR CELEBRATORY SEMINAR: JAMAICA .....  | 54        |

# **PART I – Report of Regional Seminar**

**Thursday, 4 December 2014**

## INTRODUCTION

In 2014, JAPAN-CARICOM Friendship Year was celebrated to commemorate 20 years of relations. In honour and acknowledgement of the contributions by JAPAN to CARICOM States in the area of fisheries development and management, a series of seminars was held during October 2014 to January 2015. Specifically, a Regional Seminar was held on 04 December 2014 in Trinidad and Tobago. Leading up to and shortly after the Regional Seminar, National Seminars were also held in six selected Member States: Belize, 28 October 2014; St. Kitts and Nevis, 05 November; Suriname, 20 November 2014; St. Vincent and the Grenadines, 24 November 2014; Dominica, 03 December 2014; and Jamaica, 21 January 2015.

This CRFM Technical and Advisory Document is a compilation of the reports of these various seminars, which is presented in two parts. Part I contains the report of the Regional Seminar and Part II contains the six National Seminar Reports.

The agenda for the Regional Seminar was reviewed and agreed prior to the Seminar. The agenda is given at *Appendix 1*.

The Regional Seminar was attended by representatives from eleven CRFM Member States as well as other partner and regional organizations. The full list of participants is given at *Appendix 2*.

## ITEM 1: OPENING CEREMONY

Mr. Sookram Ali, Manager, Corporate Communications, Ministry of Land and Marine Resources, chaired the Opening Ceremony. The national anthems of Japan and Trinidad and Tobago were played and a prayer was offered by a member of the Trinidad and Tobago delegation, Ms. Wandy Alexander. Mr. Ali then acknowledged and welcomed the presence of the members of the head table and proposed speakers at the Opening Ceremony: Trinidad and Tobago's Minister of Land and Marine Resources, the Honourable Mr. Jairam Seemungal; the Ambassador of the Embassy of Japan in Trinidad and Tobago, Mr. Yoshimasa Tezuka; the Executive Director of the CRFM Secretariat, Mr. Milton Haughton; and the Director of Fisheries in Trinidad and Tobago's Ministry of Land and Marine Resources, Ms. Christine Chan A Shing. Mr. Ali also acknowledged and welcomed the presence of the fisheries professionals and stakeholders, as well as observers from regional institutes and organizations. Mr. Ali then invited the Director of Fisheries, Ms. Christine Chan A Shing to deliver the official welcome on behalf of the government of Trinidad and Tobago.

In her welcome, Ms. Chan A Shing noted that it was a privilege to be able to offer the official welcome to participants on the occasion of such an important workshop. She was pleased to observe good attendance. Ms. Chan A Shing gave a special welcome to the Ambassador from the Embassy of Japan and several officials and consulting experts from JICA, whose presence reflected a continuing, firm commitment by Japan to offer fisheries development assistance to countries in the region. She stated that there were many opportunities and levels for technical training and development that JICA and the Government of Japan offered. A Technical Co-operation Project (TCP) between the Government of Trinidad and Tobago and the Government of Japan via JICA was initiated during 1995 to 2006. She wished all an enjoyable and successful workshop.

Mr. Milton Haughton, Executive Director, CRFM Secretariat, also addressed the Workshop. Mr. Haughton extended greetings to members of the head table, Mr. Andrew Magloire, Chairman of the Forum, and Chief Fisheries Officer (CFO) of Dominica, representatives of CARICOM Member States, representatives of regional organizations, members of the media and distinguished guests, noting that it was an honour to attend and to address the Workshop during the Opening Ceremony and most



importantly as part of the celebration of CARICOM-Japan Friendship Year 2014, observing 20 years of Regional Cooperation. Sustainable use of marine resources was just one of the several areas of cooperation. Mr. Haughton recognized the significant contribution of the Government of Japan to the present initiative, and to related activities in the Caribbean, in promoting the use of sustainable fisheries management in this difficult economic time. Particular mention was made of Japan-CARICOM most recent and technical assistance project, Caribbean Fisheries Co-Management Project (CARIFICO). The objective of CARIFICO was to develop and strengthen examples of co-management approaches. He noted that Japan was a developed state with modern technology, and that the CRFM was indeed very grateful that Japan had been so willing and ready to share its immense knowledge and expertise in promoting sustainable use of marine living resources for many years.

Mr. Haughton noted the impacts of the global economic crisis and that tens of thousands across the region lived in poverty, especially among our coastal and fishing communities. Mr. Haughton reflected on the Blue Economic Growth, which was the generation of economic growth and development by harnessing and using the resources of the oceans and seas. The Blue Growth concept was particularly relevant to us in CARICOM because we were all small island developing states (SIDs), with very small land space but with large marine resources. He stated the issues and challenges facing the fisheries sector were studied, discussed and clarified in a number of regional policy documents over the past few years such as the Subregional Fishery Management Plan for Flyingfish Fisheries and the Study and 5-Year Action Plan for Aquaculture Development, among many others. In closing, Mr. Haughton stated that he looked forward to continuous collaboration, relationship and friendship between CARICOM and Japan in the next 20 years, as we worked towards sustainable fisheries management and development. Mr. Haughton's full remarks are given in **Appendix 3, Annex A**.

Mr. Yoshimasa Tezuka, Ambassador in the Embassy of Japan in Trinidad and Tobago, also addressed the Workshop. Mr. Tezuka extended greetings to members of the head table and to all guests. He noted that it was a great honour to attend and address the Workshop during the Opening Ceremony, especially as it marked 20 years since the first CARICOM-Japan consultation in 1993. He emphasized the importance of the logo as it portrayed harmony and friendship between the crane and the heliconia flower. The purpose was to develop the efficient use of fisheries in each country through the process of sharing knowledge. Mr. Tezuka noted that it was important to maintain good relationships in fisheries as we shared similarities such as hurricanes and our living marine resources were important and there was continuous need for them to be developed sustainably. In closing, Mr. Tezuka expressed his sincere gratitude to all parties for the continuous collaboration to achieve such a success. Mr. Tezuka's full remarks are given in **Appendix 3, Annex B**.

The feature address was delivered by Trinidad and Tobago's Minister of Land and Marine Resources, the Honourable Mr. Jairam Seemungal. Minister Seemungal joined others in extending welcome to members of the head table, international and regional delegates, officials of the Trinidad and Tobago's Ministry of Land and Marine Resources, members of the media and other stakeholders. He noted his pleasure to address such a distinguished group of professionals and leaders at the historic Opening Ceremony of the CRFM/CARICOM/Japan Friendship Year 2014, Regional Fisheries Workshop, celebrating 20 years of relationship between CARICOM and Japan. He highlighted the fact that this Workshop will discuss the past, current and future interventions in the fisheries sector and the continuous friendship between CARICOM and Japan.

Minister Seemungal recalled two projects that were implemented in Trinidad and Tobago in conjunction with JICA through a technical co-operation programme of the Government of Japan. The projects were "The Regional Fisheries Training Project," from 1996 to 2001 and the "Project for the Promotion of Sustainable Marine Fisheries Resource Utilization in Trinidad and Tobago," from 2001 to 2006, which enhanced the training offered by CFTDI. Minister Seemungal reflected on his government's efforts to

meet the challenges of achieving sustainable fisheries management, such as updating the Fisheries Act and Legislation.

He went on to highlight the importance of fish to the national population's diet and health, and the process of upgrading the fish landing sites, with emphasis on phyto-sanitation and fish processing. Minister Seemungal embraced the Workshop and hoped that expected objectives and outputs can provide solutions for the region, especially that of Trinidad and Tobago. He reiterated the commitment of the Government of Trinidad and Tobago to its fisheries sector and to continue to work closely with JICA for the mutual benefit of both Japan and Trinidad and Tobago. In closing, Minister Seemungal wished all a successful Workshop which would result in sustainable development for the fisheries and fisherfolk in the region. The Minister's full remarks are provided in *Appendix 3, Annex C*.

The Director of Fisheries, of Trinidad and Tobago's Ministry of Land and Marine Resources, Ms. Chan A Shing, delivered the closing remarks and the vote of thanks, in which she thanked each of the speakers individually. Ms. Chan A Shing also thanked Mr. Ali for chairing the Opening Ceremony. The support of the staff of Trinidad and Tobago's Fisheries Division of the Ministry of Land and Marine Resources was also recognized. Ms. Chan A Shing also gave a special acknowledgement of appreciation to the representatives of JICA for their contributions and support for 20 years of collaborations. In respect of projects coordination, Ms. Chan A Shing recognized the important work of the CRFM Secretariat for the region. She thanked the delegates for giving their time to attend the Workshop, and their work within the CRFM for ensuring regional coordination of all fisheries management activities, especially necessary for shared resources. Ms. Chan A Shing also recognized the presence of representatives of international organizations, institutes and projects, and thanked them for their contribution to the Workshop. In closing, Ms. Chan A Shing expressed her appreciation to the media for providing a direct communication link between Workshop and the public, and noted the desire on the part of all for a very productive workshop.

In closing the Opening Ceremony, Mr. Ali thanked participants for their attention.

## **ITEM 2: HIGHLIGHTS OF 20 YEARS OF CARICOM-JAPAN COOPERATION IN FISHERIES**

Item 2 reflected on the major achievements of CARICOM-Japan relations over the past 20 years and was presented by Mr. Milton Haughton.

### Presentation summary

The presentation of CARICOM-Japan relations over the past 20 years was initiated with the first consultation in 1993. Over this period 16 consultations and 4 ministerial meetings were held. The 3<sup>rd</sup> and 4<sup>th</sup> ministerial meetings were held 1 year from each other, highlighting a very positive and strong relationship between CARICOM and Japan. A Technical Co-operation Project (TCP) between the Government of Trinidad and Tobago and Japan (JICA) was initiated in 1995, implementing CFTDI which assisted to strengthen institutional capacity through training in maintenance of marine engines, fish processing and quality control of fishing technologies. In 2002, a CARICOM Training Course was held in Japan where 14 Chief and Senior Fisheries Officers were trained in Fisheries Resource Management. A regional project (2009-2012) was executed with a baseline survey and a Master Plan for sustainable use of fisheries and aquaculture in the Caribbean, with focus on small-scale operators in coastal communities, to aid the transfer of technology and knowledge of the institutions to member states. Another joint project was initiated between CRFM Countries and JICA in May 2013 known as the *Caribbean Fisheries Co-management Project (CARIFICO)*, which proposed to establish fisheries co-management and capacity building among stakeholders, and the continuous work with pelagic species and Fish Aggregating Devices (FADs). During this 20 year relationship, many workshops and technical reports were published.

Futuristically, the next steps are to identify areas of common interest based on studies and priority areas identified by states in the CARICOM Strategic Plan, Common Fisheries Policy and Master Plan.

#### Discussion

There was considerable discussion about CARICOM countries that were not currently involved in some of the CARICOM-Japan projects and concerns regarding involvement. It was indicated that these countries partake in several ways, such as, exchange of personnel between participating and non-participating countries, as this was possible under the CARIFICO Project, and frequent workshops with representatives from CARICOM countries and fisherfolk organizations.

### **ITEM 3: REVIEW OF JAPAN FISHERIES PROJECTS: NATIONAL/BILATERAL EXPERIENCES**

Item 3 reviewed the national/bilateral experiences for Japan Fisheries Projects for Belize, St. Kitts and Nevis, Suriname, St. Vincent and the Grenadines, Jamaica and Dominica.

#### **3.1 Belize Seminar Report**

This report was prepared and presented by Mr. Mauro Gongora.

##### Presentation summary

Belize Fisheries Department held its workshop “Evaluation of JICA Fisheries Projects in Belize and Future Collaboration Initiatives,” on 28 October 2014. Belize participated in 8 JICA funded Projects. *Workshop on Capture Fishery Technology and Fishing Gear Development* with an estimated 24 participants in 2006, involved field testing of the deep water fishing gear showing possibilities of development of deep slope and diamondback squid fisheries in Belize. There was the construction of the vertical long-line fishing gear and a successful deep slope fishery in Turneffe Islands Atoll, Belize, where catch rates estimated 65% with the long-line fishing gear and was considered highly adequate for use in Belizean waters and capture of deep-water snappers. Squid fishing gear was also provided by JICA but this species was not found in Belize.

Another JICA/CRFM Project was initiated in August 2010, the “*Study on formulation of Master Plan on Sustainable Use of Fisheries Resources for Coastal Community Development in the Caribbean*”. Belize was selected as a pilot site for the implementation of the ‘*Low Cost Input Small-scale Aquaculture*’. The project observed the various Feed Conversion Ratios (FCRs) via feeding of tilapia with different diets (shrimp feed, regular rice bran, and fermented rice bran).

Some of the proposals for future collaboration include assistance to further develop deep slope fishery, support upgrade of current fish processing facilities (fishermen cooperatives) for export market, marine aquaculture, grouper and mullet (roe harvesting) farming, mangrove oyster farming, mullet harvesting of roe which was abundant along estuarine areas in Belize, study for potential markets for undeveloped fisheries and regional fishermen exchange programs including provision of additional training and fishing gear, equipment and supplies.

#### Discussion

It was noted that the deep slope fishery was underutilized in previous years but was now under production. With fishers utilizing this new fishery, sustainable harvesting should be practiced to prevent the vulnerability or collapse of this fishery in the future.

It was noted that small-scale aquaculture activities could contribute to food security and provide economic opportunities. Based on such information, improved assessments of alternative feed trials should be undertaken.

### **3.2 St. Kitts and Nevis Seminar Report**

This report was prepared by Ms. June Masters and the presentation made by Mr. Kareem Wilkin.

#### Presentation summary

The St. Kitts and Nevis Seminar was held on 5 November 2014 and highlighted some of the successes, challenges and recommendations of Japan's intervention. Some of the successes were: provision of gear technology (longline), provision of new gear technology (vertical longline for diamond back squid), technology to assist with the catching of pelagic, FAD related technology (building and deploying FADs), the fisheries facilities provided at Basseterre and Old Road represented an investment of about US\$40 million, and the donation of equipment such as computers, cameras, audio equipment (speakers), freezers, vacuum sealers and a vehicle.

Some of the challenges with regard to training included equipment and materials needed to implement training, in some cases, were not provided and were not available locally, trained personnel had not been passing on this knowledge to others and continuous (upgraded and updated) training was not offered. Other challenges included that of infrastructure and equipment such as the fisheries facilities provided (e.g. at Old Road). The infrastructure provided deviated from what was discussed and agreed to by the fishers using the facility. The Old Road facility was built to accommodate boats of maximum length 25ft, given that was the maximum size of boats using the area at that time (in 2005), currently however, the boats using the area are 40ft boats and the facility cannot accommodate these boats. In terms of equipment, personnel from immediate surroundings should be trained to repair vital equipment such as ice machines.

Some of the recommendations were all future training should include a contractual obligation which should stipulate that the trainee, upon return to St. Kitts and Nevis, would undertake activities to pass on and make available the knowledge gained from the training provided to him or her and that all equipment provided by bilateral interventions should be maintained by the government.

#### Discussion

The presentation was considered to be an excellent one. There was a very deep understanding and the issues that were highlighted were informative, particularly the challenges encountered with donated equipment. An enquiry was made regarding whether fishers received what they required in terms of aspects of fisheries or whether the projects deviated from this. It was noted that there were changes in some of the projects but the stakeholders had not been consulted on all the changes. Hence, the project output was different from what stakeholders had initially agreed.

### **3.3 Suriname Seminar Report**

This report was prepared by Ms. June Masters and presentation made by Mr. Peter A. Murray.

#### Presentation summary

The Suriname Seminar was held on 20 November 2014 and highlighted some of the projects, contributions, challenges and recommendations of Japan's intervention. Japanese shrimp trawlers had been fishing in Suriname since the early 1960s, with the establishment of SUJAFI, a shrimp processing plant, which was a joint venture between Surinamese and Japanese entrepreneurs. As the co-operation between Suriname and Japan grew closer, 2 shrimp companies were established, owning approximately

45 shrimp trawlers. In 2002, the shrimp companies were sold to 100% Surinamese Companies and most of the trawlers still operated and some exported shrimp to Japan. In the period 1979 – 1981 the Japan Marine Resource Research Center (JAMARC) conducted a survey to explore the deep-sea shrimp resources in Suriname and French Guiana.

Some of the contributions of Japan to the fisheries sector were the modernization of the small-scale fisheries sector such as research and training in shrimp and fish processing, the donation of fishing gears and outboard engines, the training of fisherfolk in maintenance and proper use of outboard engines, freezers, ice machines and the construction of two fishing centers. Suriname also provided support to the whaling program of Japan. Some of the challenges met were training personnel moving from work places, the insufficiency of skilled workers, the steady decrease of *Penaeus* shrimp catches, companies financial problems, high fuel costs for fishing operation and high costs for fishing vessel monitoring system (VMS).

Some of the recommendations for Japan's future interventions included scientific research to be conducted for *Penaeus* species in collaboration with Guyana and French Guiana, stock assessment of main target species of artisanal fisheries, technical assistance with Bycatch Reduction Devices (BRDs), technical and financial support from the Overseas Japan Cooperation to Surinamese fishermen, technical assistance in processing techniques and quality control, additional fishing centers, the establishment of a training center in Paramaribo (Suriname), processing facilities for small-scale fisheries, the strengthening of fisherfolk organizations and capacity building for public and private sector.

#### Discussion

It was noted that there was a synergy of CARICOM-Japan activities occurring in countries and there was need for them to be discussed at a more regional level to have the acquired knowledge shared.

In response to a query about the “lack” of extension staff, it was pointed out that the preferred term was “limited” as there was insufficient extension staff and extension skills throughout the region.

It was noted that the CARIFICO project would help build fisherfolk organizations, and this effect would filter to the fisherfolk. With regards to training, which was critical to fisherfolk, this can be derived from CFTDI. It was also noted that all CRFM seminars were available to all stakeholders and related information can be downloaded from the website: [www.crfm.int](http://www.crfm.int).

One of the major challenges discussed was the knowledge gap between the government and the fisherfolk. It was noted that there was the need for building capacity within fisherfolk organizations, and many projects such as those funded by ACP and EU, have attempted and still continue their focus in building these fisherfolk organizations. There was need for greater participation by the fisherfolk to aid and assist in the transformation of the fisheries sector. It was always more acceptable if fisherfolk was exchanged between countries to share their knowledge and experience.

### **3.4 St. Vincent and the Grenadines Seminar Report**

This presentation was prepared and presented by Ms. Jennifer Cruickshank-Howard.

#### Presentation summary

Diplomatic relations between St. Vincent and the Grenadines and Japan were established in 1980. Japan has been a major donor to the development of the fisheries sector of St. Vincent and the Grenadines. The Kingstown Fisheries Complex and Bus Terminal were built in 1987 and 1988 via a Japanese Fish Market Aid Project. In 2005, the Kingstown Fish Market and Fisheries Division Building were renovated and

now included a conference room that was much appreciated by the fisherfolk and other government officials.

Some of the other contributions of Japan to the fisheries sector were the addition of jetties at fisheries sites, the development of the National Fisheries Marketing Limited to manage the market, a Quality Assurance Building with wet and dry laboratories, fisheries centers, ice machines, fishing vessels and other vehicles. Staff and non-staff personnel were recipients of JICA Training in Japan such as Fishing Gear and Methods and Extension Methodology, Fishing Gear and Methods and Extension Methodology and Coastal Fishing Techniques for Sustainable Resource Use. They were also recipients to JICA Training from CFTDI such as Fish Handling and Processing, Maintenance of Refrigeration Systems for Caribbean Countries and Four Stroke Engine Maintenance. JICA experts were also attached to the Fisheries Division.

Other contributions from Japan included projects such as Study on the Formulation of a Master Plan on the Sustainable Use of Fisheries Resource for Coastal Community Development in the Caribbean, in which an overview of the fisheries sector was provided and key issues identified for coastal resources management, and the CARIFICO Project which encourages co-management such as FAD maintenance. Some of the recommendations for Japan's future interventions are future developments in fish quality, education and training. There was need for fishing to be looked at as a business, and fisheries related subjects and programs should be introduced and taught in the schools as new careers and opportunities.

#### Discussion

In response to a query on the term 'blackfish', it was clarified that this referred to pilot whales. Some of the participating countries stated that pilot whales consumed most of their pelagic fish and this was affecting their longline fishery. In response to this statement, it was suggested that the pilot whales could be consumed and be part of the food security system, subject to the necessary stock assessment. It was noted that the blackfish/pilot whales were consumed in St. Vincent and the Grenadines, Dominica and St. Lucia.

It was noted in the development of project proposals, all stakeholders should be engaged, as there was need to define what was wanted, e.g. extension work must be done in a collaborative manner. It was noted that CRFM was sourcing funds from a German Funding Agency for a proposed project. There was the need to be more competitive, to reduce cost and include the use of renewable energy as we needed to reduce our carbon footprint.

It was noted that when the time-frame for a funded project expired, the participating country should make a commitment to continue the project.

### **3.5 Jamaica Seminar Report**

This presentation was made by Mr. Ian Jones.

#### Presentation summary

Jamaica and Japan have enjoyed excellent relations of friendship, cooperation and trade. Diplomatic relations were established on 16 March 1964 between the two countries. The 40th Anniversary of diplomatic relations in 2004 was marked by friendly cultural exchanges, including the inaugural staging of the One Love Jamaica Festival in Tokyo. Bilateral relations between Jamaica and Japan have been strengthened over the years by many high level visits in the late 1990s.

Some of the other contributions of Japan to the fisheries sector were the establishment of the fishing complex, individual training in Japan, training at CFTDI, diamondback squid exploration and

participation in the project “*Formulation of a Master Plan on Sustainable Use of Fisheries Resources for Coastal Community Development in the Caribbean*”. This project was executed in 2009/2010. Also, the Pilot Project 2010-2011 themed “*Improvement of Small-scale Tilapia Farming activity through Extension and Training in Jamaica*”. This pilot program consisted of 2 components, which were local training and microcredit programs for small-scale and subsistence fish farmers, and regional training program for the officers of CRFM members’ countries.

#### Discussion

It was noted that aquaculture was a readily available and cheap source of food. The CRFM established a new Aquaculture Working Group which will identify constraints to aquaculture development and make proposals to the Caribbean Fisheries Forum and the CRFM Ministerial Council, for addressing these issues. As part of this initiative, the Aquaculture Working Group will promote sustainable aquaculture development at the national and regional levels.

In response to a query on the status of diamondback squid fishing exploration activities, it was stated that 4 diamondback squids were caught in 2006. It was noted that Dominica and JICA conducted a diamondback squid study and would provide the gear to facilitate studies in other countries.

### **3.6 Dominica Seminar Report**

This presentation was prepared and presented by Mr. Andrew Magloire.

#### Presentation summary

Diplomatic relationship between Dominica and Japan was established in 1978. Some of the contributions of Japan to the fisheries sector of Dominica were the building of fishing facilities, technical experts advice, Japanese overseas co-operation volunteers, training in Japan in areas such as Coastal Fishing Training and Extension, Planning for Fisheries Community Development, Coastal Fishing Techniques for Sustainable Resource Use, Fisheries Resource Management, Rural Development in Fisheries, and training at CFTDI in such areas as Fishing Methods: Pelagic Longline and Pot Fishing, Fishing Technology, Marine Engineering, Fisheries Resource Management Measures, Marine Fisheries Resource Management, Marine Fisheries Resource Management, Biostatistics for Fisheries Science Using SPSS and 4 stroke engine training course.

Some of the other contributions of Japan to the fisheries sector were the Fish Catch and Effort Data Forms Improvement (*CARIFICO*), Fisherman ID Card System Upgrade (*CARIFICO*), mapping boats at landing sites, sonar mapping of fishing grounds, ghost fishing, biodegradable panels, the provision of equipment, diamondback squid exploratory fishing, icebox, product development, basic fisherman training course and regional projects.

#### Discussion

In response to a query it was highlighted that for all projects coordinated by JICA, it was mandatory that an Environmental Impact Assessment (EIA) be conducted. It was advised that research work conducted by participating countries should be shared regionally and could be posted on the CRFM website.

It was noted by the CRFM Secretariat that a lot of documents were received and would be shared. The CRFM Secretariat had invested in its database and website. It was noted that data and information should be accessible not only to fishery researchers but to all stakeholders.

It was noted that the cultural influences and other inputs of stakeholders should be considered in infrastructural decisions.

## **ITEM 4: REVIEW OF JAPAN FISHERIES PROJECTS: CARICOM-WIDE EXPERIENCES**

Item 4 reviewed Japan Fisheries Projects: CARICOM-wide Experiences.

### **4.1 Grant Aid Cooperation**

This presentation was delivered by Mr. Takafumi Ura.

#### Presentation summary

The Government of Japan had prioritized the fisheries sector. At least 83% of Grant Aid had been for the fisheries sector, which also included technical assistance. Since the 1980s, Japanese fishermen had enjoyed fishing all over the world, and then fisheries production started to decline. This was the effect of the Economic Exclusive Zone (EEZ) strategy of the coastal countries and the establishment of international management schemes for pursuing sustainable fishing.

Cooperation from the government of Japan for projects resulted in both good and bad experiences. One such failed project was that of the Pacific island country, where fishing vessels were donated to allow the growth of fisheries, and after a few years, the fishing vessels were not maintained and eventually totally depreciated. It was necessary to produce some profits for re-investment in the fishing vessels. One successful project in the Pacific island country was the donation of Grant Aid by the Government of Japan for assisting in re-vitalizing the fishing sector after a huge typhoon. The government created a system to rent the fishing vessels to active fishermen with appropriate assistance including fishing methods and consultation. If the fishermen failed to maintain the fishing vessels or to account for the funds, the government ceased the rental of these fishing vessels.

Japan had an economic recession, influenced by an aged society with increased expenditure. There were budget limitations and many restrictions. It was difficult for the Official Development Assistance (ODA) Projects, hence in the fisheries sector, there were changes on development funding from building facilities to technical assistance. The ODA scheme can be used in the fisheries sector in this region as Gener / Fisheries Grant Aid, Training Program, Volunteers / Specialists, and Grassroots Human Security Grant Aid.

#### Discussion

In response to a query regarding the application for funds to participate in training programs, it was pointed out that the country's Ministry of Foreign Affairs would receive the list of training programs offered by Japan. Completed applications should be submitted to a country's Ministry of Foreign Affairs for onward transmission to the Embassy of Japan.

### **4.2 Cooperation with the Caribbean Fisheries Training and Development Institute (CFTDI).**

This presentation was delivered by Ms. Muriel Quamina.

#### Presentation summary

The projects were known as the Regional Fisheries Training Project - Phase 1 (1996-2001) and Project for the Sustainable Marine Fisheries Utilization - Phase 2 (2001-2006). Phase 1 focused on seafood technology and marketing, marine engineering, capture of fishery technology and fishing gear development. Phase 2 focused on marine fisheries resources management and fisheries extension. The aims of the project were institutional strengthening which included the transfer of technology between expert counterparts, use of appropriate technology between expert counterparts, the provision of resources to enhance training and regional collaboration.



CFTDI received from JICA information technology equipment, vehicles, fishing vessels and plant equipment such as mini-smoking kiln, sausage stuffing machine and patty forming machine. All machines were still functional. In 2014, there were courses in marine engineering (4-stroke engine maintenance and repair) that were organized by JICA in collaboration with the Yamaha Company in Japan. The instructor was from Japan and several Caribbean islands participated such as Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis and Trinidad and Tobago. The participants were sponsored by JICA.

#### Discussion

It was noted that more courses in marine engineering were needed to create a more sustainable fisheries and it was important that these training programmes be continuous. CFTDI was applauded for its continuous and great work in regional product development and training.

### **4.3 Cooperation with the CRFM – Master Plan Study**

This presentation was delivered by Dr. Susan Singh-Renton.

#### Presentation summary

This was a study between CRFM and JICA. The Japanese were very logical in their approach, and conducted considerable research before the study was implemented. The study phases were the Inception Mission (May-June 2009), the Baseline Survey (July-November 2009), the Draft Master Plan (February-March 2010), the Pilot Projects (April 2010- November 2011) and the Final Master Plan (January-March 2012). The Study's aim was *"Sustainable use and management of Fisheries Resources by Coastal Communities"*, by 4 approaches.

The FAD Pilot Project was conducted in St. Lucia and Dominica, and included Fishers FAD workshops, interviews, training and monitoring of FAD fishing activities in general. The Aquaculture Pilot Project, hosted by Jamaica and Belize, included workshops, training activities, and feed trials (testing various feeds, stock levels and monitoring). The Statistics Pilot Project, hosted by St. Vincent and the Grenadines and Guyana, included interviews, training, field work and monitoring activities also. During this pilot project, data log sheets were developed and the data management process was also reviewed and new methods tested.

The proposed framework for successful implementation of the Master Plan was developed, attempted to use the existing CRFM structure, but rationalized the modification of the CRFM structure taking into account resource constraints of the CRFM and other challenges such as communication, resource mobilization and diverse environmental, political and economic situations. Consequently, the Master Plan proposed modification of existing programmes such as Fisheries Statistics and Information Management Programs and Fisheries Resource Management and Development Program, and the addition of new programmes such as Law and Policy, Aquaculture, Fishers and Community Organization, to reflect priorities identified. Additionally, the proposed framework advocated the use of regional working groups to facilitate improved and expanded networking and knowledge and information exchange. The Master Plan further recognized the need for an active management cycle.

#### Discussion

It was noted that the mode of data collection should be regionally standardized and it was necessary for community organizations' programs to focus on fishers' self-esteem and the important role they played in the maintenance of food security for a country.

It was agreed that the Common Fisheries Policy (CFP) would support the standardization of data regionally.

It was noted that a lot of work was being done with the CNFO.

#### **4.4 Technical Cooperation (training and capacity building)**

This presentation was delivered by Mr. Nariaki Mikuni.

##### Presentation summary

The Fourth Japan-CARICOM Ministerial-Level Conference was held on 15 November 2014 in Tokyo and the Foreign Ministers reaffirmed their global partnerships and mutual interests. A ministerial joint statement between Japan and CARICOM was issued, and the areas of Japan-CARICOM Cooperation were identified in the fields of disaster risk reduction, counter measures against environmental degradation, climate change, energy, waste management and fisheries. Fisheries development goals were based mainly on fish marketing for profitable use of fishery resources and fisheries management for sustainable use of fishery resources.

##### Discussion

This item was discussed together with item (4.5), Cooperation with the CRFM – CARIFICO Project.

#### **4.5 Cooperation with the CRFM – CARIFICO Project**

This presentation was delivered by Mr. Nariaki Mikuni.

##### Presentation summary

The Fisheries Co-Management Project (CARIFICO) has been a joint collaboration between CRFM member countries, CRFM Secretariat and JICA. The project was initiated on 01 May 2013 with a 5 year period. The project purpose was to establish real examples of fisheries co-management. FADs were selected for the pilot activities. FADs require cooperation among fishers as both demersal and pelagic fishers use them. Pilot activities were carried out in 6 eastern Caribbean countries where FADs were used, and the outputs of the pilot activities will be disseminated across the region.

The expected outputs for FADs were the consensus building on fishing rules around FADs and their maintenance, licensing to FAD fishers participating in co-management, cost sharing for maintenance and replacement of the FADs, and recording and reporting using the logbook.

CARIFICO has been conducting a variety of activities to promote co-management. Those activities have been classified into two types: “activities that directly support the co-management” such as consultation, data gathering information, issuing fisher IDs and formulation of fisheries management plan, and “activities that contribute to co-management indirectly” such as to build a trusting relationship among fishers through collaborative work organized by CARIFICO.

##### Discussion

In response to a query about fisher registration and issuing fisher IDs for the use of FADs, it was pointed out that the Fisheries Departments were the regulatory bodies that managed fisheries laws, and most likely the Fisheries Departments will eventually relinquish management to fisher organizations to maintain FADs.

It was noted that management and co-management were necessary for the maintenance and replacement of FADs.

It was stated by Grenada that JICA had coordinated successful projects in Grenada such as infrastructure and the donation of longline trawlers. This fleet has grown in numbers and account for a large percentage of annual landed catch.

**ITEM 5: SCOPE FOR NEW INTERVENTIONS – EMERGING AND FUTURE ISSUES, AND PRIORITY AREAS CONSISTENT WITH THE CARIBBEAN COMMUNITY COMMON FISHERIES POLICY AND THE CARICOM STRATEGIC PLAN**

Item 5 consisted of a panel discussion facilitated by the Workshop Chairperson and was intended to consider the achievements, advantages and challenges of CARICOM-Japan cooperation in the area of fisheries. The panel consisted of representatives from Trinidad and Tobago Fisheries Division, Caribbean Fisheries Forum, CRFM Secretariat, Caribbean Network of Fisherfolk Organizations (CNFO) and JICA.

**Panelist's Introduction Summary: JICA – Panel representative, Mr. Nariaki Mikuni**

For future interventions, it would be important to examine JICA / Japan's unique approach to projects. Every donor, non-governmental organization (NGO) or private sector entity had a different and comparative advantage. The planning for projects should be in a phased approach and should consider factors like marketing, quality assurance, management and fishing technology amongst others factors that can be provided by JICA / Japan. All future interventions should be collaborative.

**Panelist's Introduction Summary: CRFM Secretariat – Panel representative, Mr. Milton Haughton**

Future interventions can be summarized in two words/phrases (1) conservation and (2) improving income and profitability of fisheries operations at an individual and entrepreneurship level. Careful attention and consideration should be given to data, information and research to get a better understanding of the current status of resources. There was the need to improve data for present species being harvested. Recently, there were data requirements for the Queen Conch and Nassau Grouper in relation to a query from a US ESA. Fortunately, there was sufficient available data on the status of Queen Conch stocks to support a determination that Queen Conch was not endangered. However, for the Nassau Grouper there were limited information and data. Based on other available information, the Nassau Grouper could become extinct in the near future.

It was important to note that stocks were regionally distributed and not at a national level. It was not effective for one country to invest in protecting species while neighboring countries did not. To move forward it was important to look at regional dimensions such as the Ecosystem Approach to Fisheries (EAF). Aquaculture had the greatest potential for development in the future, and it was important to invest to lay this foundation, especially aquaculture in the marine environment.

Communication, awareness building and information sharing were very critical areas. A lot of people outside of the fisheries sector especially policy makers, fishing communities and the public were unaware of the issues and challenges faced. Building awareness of and appreciation for the importance of fisheries was a mammoth task. Continuous capacity building, not only for government stakeholders but also for fisherfolk, NGOs and private stakeholders was required.

**Panelist's Introduction Summary: Trinidad and Tobago Fisheries Division - Panel representative, Mr. Harnarine Lalla**

From previous discussions, it was apparent that the role of aquaculture in food security was undisputed; we cannot escape the fact that marine capture fisheries cannot keep pace with world demand for these products. The Master Plan developed was very comprehensive with respect to aquaculture, however, every country within the region, would have issues and specificities in adoption of aquaculture.

Within Trinidad and Tobago in the last few years, the growth of aquaculture was through political will and having a "champion" in government. When work on the Master Plan began, it was aligned parallel to Trinidad and Tobago's approach to Aquaculture Development. This approach included an evaluation of the situation and needs of the country, and to identify solutions in the short, medium and long terms. Unfortunately, there has been insufficient monitoring of the work progress during this period. It was pointed out that recently, aquaculture farmers noted an increase in performance. The representative noted a willingness to share the experience of Trinidad and Tobago.

**Panelist's Introduction Summary: Caribbean Network of Fisherfolk Organizations (CNFO) – Panel representative, Mr. Winsbert Harry**

JICA relationship with CNFO began with the CARIFICO Project. It was a privilege for fishers to participate in discussion regarding new fisheries interventions. It was necessary that fishers see fishing as a business. CNFO have read the CFP and the Small-scale Fisheries Guidelines. These should be shared with primary fisherfolk organizations, so they can enlighten and educate their members about what was occurring at a higher level.

Product marketing was a great challenge for fisherfolk throughout the region, and there was a need for togetherness in trading and marketing with each other. There was also a need to sustainably develop and utilize the fisheries resources around the region. Improved communication was necessary via training and sharing knowledge among fishers from different countries.

**Panelist's Introduction Summary: Caribbean Fisheries Forum – Panel representative, Mr. Andrew Magloire**

There was need to bridge the gap in the challenges we faced, more specifically, to advance development in the fisheries sector in the years to come. Currently there was the continuous depletion of species, as mentioned earlier the Queen Conch and the Nassau Grouper were some examples. Every day, the sustainability of more and more fisheries based species was being questioned. The framework existed to make sustainable use of the resources that the present actions did not emulate. While it was important to develop the underdeveloped fishery resources, there was also need to address the issue of overcapacity. In addition, fishers needed to consider themselves as businesspersons. Fishers needed assistance in financial management; there was the need to teach sustainability.

The Forum representative noted that it was necessary to advance research in climate change and new invasive species. In 2007, in Dominica, a new seagrass species was identified in a small quantity. However, by 2014 this seagrass covered 93% of the coastline. It was observed that this species of seagrass has a level exclusive to certain biodiversity as compared to other seagrass beds.

Fisherfolk organizations should have a more active role in the sustainable development of the fisheries sector.

### Discussion

It was noted that fishers needed assistance in regulating the fishery to have regular prices so that their margin of profit can be gained. Consideration must be given to the cost incurred to fishers to send their boats out to sea.

It was stated that Japan had transformed the whole fishing industry in Dominica, both for the fishers and the fish vendors. As stated earlier, the majority of fishers were poor but there were large sea spaces / EEZ available, and there was need for resources to go further out to sea for longer periods such as larger vessels with proper cold storage. The attitude of fishers has changed since the intervention of the Japanese in Dominica. Before, fishers used to consider themselves as poor and illiterate, but when changes were made to their surroundings such as infrastructure and cold storage, their attitude changed. This may have occurred in other Caribbean Islands.

It was noted that training received from JICA/Japan, has assisted in strengthening extension work and there was a need to ensure that trainees share their knowledge on return to their country. It was necessary for a JICA Alumni, for knowledge to be shared amongst trainees and countries. There was need for more research on invasive species and climate change to inform stakeholders. It was stated that there was need for specialization of fishing activities, to enhance stronger management. By specialization there can be more synergies in the fishing sector.

### **ITEM 6: THE WAY FORWARD.**

Item 6 consisted of a discussion facilitated by the Workshop Chairperson to review, discuss and develop an agreed “Statement on the issue of cooperation in fisheries, identifying broad areas for future cooperation.” The agreed, final statement is given in *Appendix 4*.

### Discussion

It was proposed that there was need for a JICA Alumnus [arrangement] and better communication to exchange technical and fisher experience. There was the need for JICA/Japan to expand their facilities and support to other CARICOM countries. It was also proposed that there was a need for the strengthening of fisherfolk organizations and training courses.

It was also proposed that there should be a special publication to highlight JAPAN-CARICOM Friendship Year 2014, observing 20 years of Regional Cooperation.

### **ITEM 7: WORKSHOP CLOSURE**

The Workshop Chairperson thanked all for their participation and inspiration.

## APPENDIX 1: AGENDA

| <b>CRFM CARICOM-Japan Friendship Year Regional Fisheries Workshop</b><br><b>Thursday, 4 December 2014</b> |  |   |             |
|---|--|---|-------------|
|   |  | Registration of participants  | 0830 - 0900 |
| <b>ITEM1</b>  |  | <b>Opening ceremony</b><br><br><i>Special delegates have been invited address the Regional Workshop during a formal opening ceremony.</i>   | 0900 – 0945 |
|   |  | <b>COFFEE BREAK</b>   | 0945 – 1000 |
| <b>ITEM 2</b>   |  | <b>Highlights of 20 years of CARICOM-Japan Cooperation in fisheries</b><br><br><i>A 15-minute powerpoint presentation by the CRFM Secretariat will reflect on the major achievements of CARICOM-JAPAN relations over the past 20 years.</i>           | 1000 - 1015 |
| <b>ITEM 3</b>   |  | <b>Review of Japan fisheries projects: national / bilateral experiences</b>   |             |
| 3.1   |  | Belize Seminar report<br><br><i>A 10-minute powerpoint presentation by the representative from Belize will summarise the review, findings, conclusions and recommendations of the country seminar.</i>  | 1015 – 1030 |
| 3.2   |  | St. Kitts and Nevis Seminar report<br><br><i>A 10-minute powerpoint presentation by the representative from St. Kitts and Nevis will summarise the review, findings, conclusions and recommendations of the country seminar</i>                       | 1030 – 1045 |
|   |  | <b>COFFEE BREAK</b>   | 1045 – 1100 |
| 3.3   |  | Suriname Seminar report<br><br><i>A 10-minute powerpoint presentation by the representative from Suriname will summarise the review, findings, conclusions and recommendations of the country seminar</i>   | 1100 – 1115 |
| 3.4   |  | St. Vincent and the Grenadines Seminar report<br><br><i>A 25-minute powerpoint presentation by the representative from St. Vincent and the Grenadines will summarise the review, findings, conclusions and recommendations of the country seminar</i> | 1115 – 1145 |

|               |  |             |
|---------------|--|-------------|
| 3.5           | Jamaica Seminar report<br><br><i>A 10-minute powerpoint presentation by the representative from Jamaica will summarise the review, findings, conclusions and recommendations of the country seminar</i>  | 1145 – 1200 |
| 3.6           | Dominica Seminar report<br><br><i>A 10-minute powerpoint presentation by the representative from Dominica will summarise the review, findings, conclusions and recommendations of the country seminar</i>  | 1200 – 1215 |
|               | <b>LUNCH</b>   | 1215 – 1315 |
| <b>ITEM 4</b> | <b>Review of Japan fisheries projects: CARICOM-wide experiences</b>  |             |
| 4.1           | Grant aid Cooperation<br><i>A 15-minute presentation by a representative of the Embassy of Japan will review the aims and achievements of CARICOM-Japan cooperation in respect of the Grant Aid Cooperation programme</i>  | 1315 – 1335 |
| 4.2           | Cooperation with the Caribbean Fisheries Training and Development Institute (CFTDI)<br><i>A 15-minute powerpoint presentation by the representative from CFTDI will review the aims and achievements of cooperation between Japan and CFTDI</i>  | 1335 – 1355 |
| 4.3           | Cooperation with the CRFM – Master Plan Study<br><i>A 15-minute powerpoint presentation by the CRFM Secretariat will review the aims and achievements of cooperation between Japan and CRFM in respect of the Master Plan Study, including recommendations on the way forward</i>  | 1355 – 1415 |
| 4.4           | Technical Cooperation (training and capacity-building)<br><i>A 15-minute presentation by a representative of the JICA Dominican Republic Office will review the aims and achievements of CARICOM-Japan cooperation in respect of training, and use of experts and volunteers for capacity building in countries</i>  | 1415 – 1435 |
| 4.5           | Cooperation with the CRFM –CARIFICO project<br><i>A 15-minute powerpoint presentation by an expert from JICA will review the aims and achievements to date of cooperation between Japan and CRFM in respect of the CARIFICO project, including recommendations on the way forward</i>  | 1435 – 1455 |
| <b>ITEM 5</b> | <b>Scope for new interventions - emerging and future issues, and priority areas consistent with the Caribbean Community Common Fisheries Policy and the CARICOM Strategic Plan</b><br><br><i>The Workshop Chairperson will facilitate a panel discussion, intended to consider the achievements, advantages, and challenges of CARICOM-Japan cooperation in the area of fisheries. The panel will consist of</i> | 1455 – 1515 |

|                            |  |   |             |
|----------------------------|--|---|-------------|
|                            |  | <i>representatives from: Trinidad and Tobago Fisheries Division, Caribbean Fisheries Forum, CRFM Secretariat, Caribbean Network of Fisherfolk Organizations (CNFO), and JICA.</i>   |             |
|                            |  | <b>COFFEE BREAK</b>   | 1515 – 1530 |
| <b>ITEM 5<br/>- cont'd</b> |  | <p><b>Scope for new interventions - emerging and future issues, and priority areas consistent with the Caribbean Community Common Fisheries Policy and the CARICOM Strategic Plan</b></p> <p><i>The Workshop Chairperson will facilitate a panel discussion, intended to consider current and emerging issues, challenges and opportunities for sustainable use of marine living resources and possibilities for future CARICOM / Japanese cooperation in fisheries. The panel will consist of representatives from: Trinidad and Tobago Fisheries Division, Caribbean Fisheries Forum, CRFM Secretariat, Caribbean Network of Fisherfolk Organizations (CNFO), and JICA. Each panellist will make a brief (2-3 minutes) presentation followed by a moderated discussion with questions and comments from participants.</i></p> | 1530 – 1615 |
| <b>ITEM 6</b>              |  | <p><b>The Way Forward</b></p> <p><i>The Workshop Chairperson will facilitate review, discussion and development of an agreed 'Draft Statement on the issue of cooperation in fisheries, identifying broad areas for future cooperation'</i></p>   | 1615 - 1700 |
| <b>ITEM 7</b>              |  | <p><b>Workshop Closure</b></p> <p><i>The Workshop Chairperson will invite any closing remarks</i></p>   | 1700 - 1715 |



## APPENDIX 2: LIST OF PARTICIPANTS

|    |  |    |   |
|----|--|----|---|
| 1. | <p><b><u>ANTIGUA and BARBUDA</u></b></p> <p>Mr. Hilroy D. A. Simon<br/>CARIFICO Project Manager<br/>Fisheries Division<br/>Ministry of Agriculture, Lands, Housing and the Environment<br/>Point Wharf Fisheries Complex<br/>Lower North Street, St. John's<br/>Tel: 268-462-1372<br/>Fax: 268-462-1372<br/>Email: <a href="mailto:hilroy_simon@yahoo.com">hilroy_simon@yahoo.com</a><br/><a href="mailto:fisheriesantigua@gmail.com">fisheriesantigua@gmail.com</a></p> | 2. | <p><b><u>THE BAHAMAS</u></b></p> <p>Mr. Michael T. Braynen<br/>Director<br/>Department of Marine Resources<br/>Ministry of Agriculture and Marine Resources<br/>P.O. Box N-3028<br/>Nassau N.P.<br/>Tel: 242-393-1777<br/>242-393-1014<br/>Fax: 242-393-0238<br/>Email: <a href="mailto:michaelbraynen@bahamas.gov.bs">michaelbraynen@bahamas.gov.bs</a></p>  |
| 3. | <p><b><u>BARBADOS</u></b></p> <p>Ms. Vernell Nicholas<br/>President<br/>Barbados National Union of Fisherfolk Organization (BARNUFO)<br/>c/o Fisheries Division<br/>Princess Alice Highway, St. Michael<br/>Tel: 246-426-5189<br/>246-268-7168<br/>Email: <a href="mailto:barnufo@caribsurf.com">barnufo@caribsurf.com</a><br/><a href="mailto:Vernel.nichols@gmail.com">Vernel.nichols@gmail.com</a></p>  | 4. | <p><b><u>BELIZE</u></b></p> <p>Mr. Mauro Gongora<br/>Fisheries Officer<br/>Fisheries Department<br/>P.O. Box 148<br/>Princess Margaret Drive, Belize City<br/>Tel: 501-224-4552<br/>Fax: 501-223-2986<br/>Email: <a href="mailto:fisheries_department@fisheries.gov.bz">fisheries_department@fisheries.gov.bz</a><br/><a href="mailto:megongora@hotmail.com">megongora@hotmail.com</a></p>  |
| 5. | <p><b><u>DOMINICA</u></b></p> <p>Mr. Andrew Magloire<br/>Chief Fisheries Officer<br/>Fisheries Division<br/>Ministry of Environment, Natural Resources, Physical Planning and Fisheries<br/>Roseau Fisheries Complex Building<br/>Dame M.E. Charles Boulevard, Roseau<br/>Tel: 767-266-5291<br/>Fax: 767-448-0140<br/>Email: <a href="mailto:fisheriesdivision@dominica.gov.dm">fisheriesdivision@dominica.gov.dm</a></p>  | 6. | <p><b><u>GRENADA</u></b></p> <p>Mr. Francis T. Calliste<br/>Fisheries Officer<br/>Fisheries Division<br/>Ministry of Agriculture<br/>Melville Street<br/>St. George's<br/>Tel: 473-442-7320/440-3814/417-2908<br/>Fax: 473-440-6613<br/>Email: <a href="mailto:tobex00@hotmail.com">tobex00@hotmail.com</a></p>   |
| 7. | <p><b><u>GRENADA</u></b></p> <p>Mr. James Ince<br/>Manager<br/>Spice Isle Fish House Limited<br/>Grand Mall<br/>St. George's<br/>Tel: 473-435-7122 / 7123<br/>Fax: 473-435-7174<br/>Email: <a href="mailto:jamesince@sifishhouse.com">jamesince@sifishhouse.com</a></p>  | 8. | <p><b><u>JAMAICA</u></b></p> <p>Mr. Ian Jones<br/>Acting Director, Marine Branch<br/>Fisheries Division<br/>Ministry of Agriculture and Fisheries<br/>P.O. Box 470, Marcus Garvey Drive<br/>Kingston 13<br/>Tel: 876-923-8811 / 2 / 3<br/>Fax: 876-937-6726<br/>Email: <a href="mailto:ikjones@moa.gov.jm">ikjones@moa.gov.jm</a><br/><a href="mailto:Fisheries_jamaica@live.com">Fisheries_jamaica@live.com</a><br/><a href="mailto:fisheries@moa.gov.jm">fisheries@moa.gov.jm</a></p> |

|     |  |     |  |
|-----|--|-----|--|
| 9.  | <b><u>ST. KITTS and NEVIS</u></b><br><br>Mr. Kareem Wilkin<br>Fisheries Assistant<br>Department of Marine Resources<br>Prospect<br>Nevis<br>Tel: 869-469-5521<br>Fax: 869-469-0839<br>Email: <a href="mailto:miu@niagov.com">miu@niagov.com</a><br><a href="mailto:marcwill3@aol.com">marcwill3@aol.com</a>  | 10. | <b><u>SAINT LUCIA</u></b><br><br>Mr. Seon Ferrari<br>Fisheries Officer<br>Department of Fisheries<br>Ministry of Agriculture, Food Production,<br>Fisheries, Cooperative and Rural Development<br>Pointe Seraphine, Castries<br>Tel: 758-468-4143 / 4135<br>758-725-1808<br>Fax: 758-452-3853<br>Email: <a href="mailto:seon.ferrari@govt.lc">seon.ferrari@govt.lc</a><br><a href="mailto:deptfish@govt.lc">deptfish@govt.lc</a> |
| 11. | <b><u>SAINT VINCENT and the GRENADINES</u></b><br><br>Ms. Jennifer Cruickshank-Howard<br>Chief Fisheries Officer (Ag.)<br>Fisheries Division<br>Ministry of Agriculture, Rural Transformation,<br>Forestry, Fisheries and Industry<br>Richmond Hill, Kingstown<br>Tel: 784-456-2738 / 1178<br>Fax: 784-457-2112<br>Email: <a href="mailto:jencruickshankhoward@yahoo.com">jencruickshankhoward@yahoo.com</a><br><a href="mailto:fishdiv@vincysurf.com">fishdiv@vincysurf.com</a> | 12. | <b><u>TRINIDAD and TOBAGO</u></b><br><br>Ms. Shandira Ankiah<br>Fisheries Officer / Consultant<br>Fisheries Division<br>Marine Fishery Analysis Unit<br>Ministry of Land and Marine Resources<br>Western Main Road<br>Chaguaramas<br>Tel: 868-634-4504 / 4505<br>Fax: 868-634-4488<br>E-mail: <a href="mailto:shandira@gmail.com">shandira@gmail.com</a>   |
| 13. | <b><u>TRINIDAD and TOBAGO</u></b><br><br>Ms. Nerissa Lucky<br>Fisheries Officer<br>Fisheries Division<br>Ministry of Land and Marine Resources<br>35 Cipriani Blvd, Newtown<br>Port of Spain<br>Tel: 868-623-8525 / 623-6028<br>Fax: 868-623-8542<br>Email: <a href="mailto:nerissalucky@gmail.com">nerissalucky@gmail.com</a>   | 14. | <b><u>TRINIDAD and TOBAGO</u></b><br><br>Mr. Harnarine Lalla<br>Fish Culturist (Ag.)<br>Fisheries Division<br>Ministry of Land and Marine Resources<br>35 Cipriani Blvd, Newtown<br>Port of Spain<br>Tel: 868-625-9358 / 623-8525 / 623-6028<br>Fax: 868-623-8542<br>Email: <a href="mailto:h_lalla@hotmail.com">h_lalla@hotmail.com</a>   |
| 15. | <b><u>TRINIDAD and TOBAGO</u></b><br><br>Ms. Muriel Quamina<br>Technical Instructor (Fish Processing)<br>Caribbean Fisheries Training and<br>Development Institute<br>Western Main Road, P.O. Box 1150<br>Chaguaramas, Port of Spain<br>Tel: 868-634-4587 / 1635<br>Fax: 868-634-4405<br>Email: <a href="mailto:mquamina@cftdi.edu.tt">mquamina@cftdi.edu.tt</a>   | 16. | <b><u>TRINIDAD and TOBAGO</u></b><br><br>Mr. Garth Ottley<br>Fisheries Officer<br>Tobago House of Assembly<br>Department of Marine Resources, and Fisheries<br>Montessari Drive<br>Glen Road, Tobago<br>Tel: 868-639-4354<br>Fax: 868-639-1382<br>Email: <a href="mailto:garthottley1@gmail.com">garthottley1@gmail.com</a>  |
| 17. | <b><u>TRINIDAD and TOBAGO</u></b><br><br>Mr. Ryan S. Mohammed<br>Chairman<br>Aquaculture Association of Trinidad   | 18. | <b><u>TRINIDAD and TOBAGO</u></b><br><br>Mr. Terrence Holmes<br>Fisheries Extension Officer<br>Department of Marine Resources and Fisheries  |

|                             |  |     |   |
|-----------------------------|--|-----|---|
|                             | Aquaculture Task Force of Trinidad & Tobago<br>Seafood Industry Development Company<br>#6 Bejucal Extension 1<br>Uriah Butler Highway<br>Charlieville, Chaguanas<br>Tel: 868-343-2198<br>E-mail: <a href="mailto:aquatt1@gmail.com">aquatt1@gmail.com</a><br>Skype: ryan.simon.mohammed    |     | Tobago House of Assembly<br>#20 Montessori Drive<br>Glen Road, Tobago<br>Tel: 868-639-4354<br>Fax: 868-639-1382<br>Email: <a href="mailto:tholmes_64@yahoo.com">tholmes_64@yahoo.com</a>  |
| 19.                         | <b><u>TRINIDAD and TOBAGO</u></b><br><br>Mr. Randy I. Mohammed<br>Operations Coordinator<br>Agriculture Now Training Unit<br>Ministry of Food Production<br>Brechin Castle<br>Couva<br>Tel: 868-679-7811<br>E-mail: <a href="mailto:agriculturenow@yahoo.com">agriculturenow@yahoo.com</a> | 20. | <b><u>TRINIDAD and TOBAGO</u></b><br><br>Mr. Denny Singh<br>Agriculture Coordinator<br>Agriculture Now Training Unit<br>Ministry of Food Production<br>Brechin Castle<br>Couva<br>Tel: 868-679-7811<br>E-mail: <a href="mailto:agriculturenow@yahoo.com">agriculturenow@yahoo.com</a>   |
| <b><u>ORGANIZATIONS</u></b> |  |     |   |
|                             | <b>CARIBBEAN NETWORK OF FISHERFOLK ORGANIZATION (CNFO)</b>   |     |   |
| 21.                         | Mr. Pascal Baylon Fontaine<br>Secretary<br>National Association of Fisherfolk<br>Cooperative<br>Glenn Road, Roseau<br>Dominica<br>Tel: 767-613-4444<br>E-mail: <a href="mailto:nafcoop@hotmail.com">nafcoop@hotmail.com</a>  | 22. | Mr. Winsbert Harry<br>Vice President / Fisherman<br>National Fisherfolk Cooperative<br>Kingstown<br>St. Vincent and the Grenadines<br>Tel: 784-433-2614<br>Fax: 784-457-2112<br>Email: <a href="mailto:winsbertharry@yahoo.com">winsbertharry@yahoo.com</a><br><a href="mailto:nationalfisherfolk@gmail.com">nationalfisherfolk@gmail.com</a><br><a href="mailto:cu@yahoo.com">cu@yahoo.com</a> |
| <b>CRFM SECRETARIAT</b>     |  |     |   |
| 23.                         | Mr. Milton Haughton<br>Executive Director<br>CRFM Secretariat<br>P.O. Box 642<br>Princess Margaret Drive<br>Belize City<br><b>BELIZE</b><br>Tel: 501-223-4443<br>Fax: 501-223-4446<br>Email: <a href="mailto:milton.haughton@crfm.int">milton.haughton@crfm.int</a><br>Skype: milton_h     | 24. | Dr. Susan Singh-Renton<br>Deputy Executive Director<br>CRFM Secretariat<br>3 <sup>rd</sup> Floor Corea's Building<br>Halifax and Hillsboro Streets<br>Kingstown<br><b>ST. VINCENT and the GRENADINES</b><br>Tel: 784-457-3474<br>Fax: 784-457-3475<br>Email: <a href="mailto:susan.singhrenton@crfm.int">susan.singhrenton@crfm.int</a><br>Skype: ssinghrenton                                  |
| 25.                         | Mr. Peter A. Murray<br>Programme Manager, Fisheries Management<br>and Development<br>CRFM Secretariat<br>P.O. Box 642  | 26. | Mr. Delmar Lanza<br>Manager, Finance and Administration<br>CRFM Secretariat<br>P.O. Box 642<br>Princess Margaret Drive  |

|  |  |     |  |
|--|--|-----|--|
|  | Princess Margaret Drive<br>Belize City<br><b>BELIZE</b><br>Tel: 501-223-4443<br>Fax: 501-223-4446<br>Email: <a href="mailto:peter.a.murray@crfm.int">peter.a.murray@crfm.int</a><br>Skype: pamollox  |     | Belize City<br><b>BELIZE</b><br>Tel: 501-223-4443<br>Fax: 501-223-4446<br>Email: <a href="mailto:delmar.lanza@crfm.int">delmar.lanza@crfm.int</a><br>Skype: delmar0364   |
| 27.  | Mr. Mikhail Francis<br>Administrative Assistant<br>CRFM Secretariat – CARIFICO Project<br>3 <sup>rd</sup> Floor Coreá's Building<br>Halifax and Hillsboro Streets<br>Kingstown<br><b>ST. VINCENT and the GRENADINES</b><br>Tel: 784-457-3474<br>Fax: 784-457-3475<br>Email: <a href="mailto:mikhail.francis@crfm.int">mikhail.francis@crfm.int</a><br>Skype: mikhail.onthejob1   |     |  |
| <b><u>INSTITUT FRANÇAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER (IFREMER)</u></b> |  |     |  |
| 28.  | Mr. Lionel Reynal<br>Delegate for French West Indies and Head of<br>Martinique Station<br>Research Unit "Marine Biodiversity and<br>Environment"<br>Institut français de Recherche pour<br>l'exploitation de la mer<br>79 route de Pointe Fort, 97231 Le Robert<br>Martinique (FWI)<br>Tel: 596-596-66-1950<br>Fax: 596-596-66-1941<br>GSM: 696-40-68 32<br>Email: <a href="mailto:lionel.reynal@ifremer.fr">lionel.reynal@ifremer.fr</a><br>Skype: lreynalifremer |     |  |
| <b>JAPAN INTERNATIONAL COOPERATION AGENCY</b>  |  |     |  |
| 29.  | Mr. Nariaki Mikuni<br>JICA<br>E-mail: <a href="mailto:fjmick@gmail.com">fjmick@gmail.com</a>   | 30. | Mr. Tasku Ishibashi<br>Senior Representative<br>JICA Dominican Republic<br>Sarasota #20<br>La Julia, Santo Domingo<br>Dominican Republic<br>Tel: 809-381-0005<br>Fax: 809-381-0048<br>E-mail: <a href="mailto:Ishibashi.Tasuku@jica.go.jp">Ishibashi.Tasuku@jica.go.jp</a> |
| 31.  | Mr. Takafumi Ura<br>Second Secretary<br>Embassy of Japan in Trinidad and Tobago<br>5 Hayes Street<br>St. Clair<br>Port-of-Spain<br>Trinidad and Tobago   | 32. | Mr. Mitsuhiro Ishida<br>CARIFICO / JICA<br>c/o Fisheries Division<br>Point Wharf Fisheries Complex<br>St. John's<br>Antigua and Barbuda<br>Tel: 268-462-1372   |

|                                      |   |     |  |
|--------------------------------------|---|-----|--|
|                                      | Tel: 868-628-5991 (Ext.222)<br>Fax: 868-628-0858<br>E-mail: <a href="mailto:takafumi.ura@mofa.go.jp">takafumi.ura@mofa.go.jp</a>  |     | E-mail: <a href="mailto:paramichan@gmail.com">paramichan@gmail.com</a><br>Skype: mitsuhiro-ishida  |
| <b>UNIVERSITY OF THE WEST INDIES</b> |   |     |  |
| 33.                                  | Dr. Hazel A. Oxenford<br>Professor of Marine Ecology and Fisheries<br>Centre for Resource Management and<br>Environmental Studies (CERMES)<br>University of the West Indies, Cave Hill<br>Campus,<br>BARBADOS, BB 11000<br>Tel: 246-417-4571<br>Fax: 246-424-4204<br>E-mail: <a href="mailto:hazel.oxenford@cavehill.uwi.edu">hazel.oxenford@cavehill.uwi.edu</a> |     |  |
| <b>MEDIA CONSULTANT</b>              |   |     |  |
| 34.                                  | Ms. Adelle Roopchand<br>Media Consultant<br>Trinidad and Tobago<br>Tel: 868-765-4110<br>E-mail: <a href="mailto:adelleroopchand@gmail.com">adelleroopchand@gmail.com</a><br>Skype: adellezairaroopchand   |     |  |
| <b>WORKSHOP SECRETARIAT</b>          |   |     |  |
| 35.                                  | <b><u>BELIZE</u></b><br><br>Ms. Sherlene Audinett<br>Sr. Secretary<br>CRFM Secretariat<br>Princess Margaret Drive<br>P.O. Box 642<br>Belize City<br>Tel: 501-223-4443<br>Fax: 501-223-4446<br>Email: <a href="mailto:sherlene.audinett@crfm.int">sherlene.audinett@crfm.int</a><br>Skype: sherleneaudinett  | 36. | <b><u>TRINIDAD and TOBAGO</u></b><br><br>Ms. Wendy Thomas<br>Fisheries Assistant<br>Fisheries Division<br>Marine Fishery Analysis Unit<br>Ministry of Land and Marine Resources<br>Western Main Road<br>Chaguaramas<br>Tel: 868-634-4504 / 4505<br>Fax: 868-634-4488<br>E-mail: <a href="mailto:wthomas@gov.tt">wthomas@gov.tt</a> |
| 37.                                  | <b><u>TRINIDAD and TOBAGO</u></b><br><br>Ms. Sharon Hinds<br>Handyman<br>Fisheries Division<br>Marine Fishery Analysis Unit<br>Ministry of Land and Marine Resources<br>Western Main Road<br>Chaguaramas<br>Tel: 868-634-4504 / 4505<br>Fax: 868-634-4488   |     |  |

### **APPENDIX 3, ANNEX A: ADDRESS BY THE EXECUTIVE DIRECTOR, CRFM SECRETARIAT, MR. MILTON HAUGHTON**

Mr. Chairman, Sookram Ali,  
Hon. Jairam Seemungal, Min of Land and Marine Resources, Trinidad and Tobago  
His Excellency, Ambassador Yoshimasa Tezuka, Embassy of Japan, T&T  
Ms. Sheryl-Anne Haynes, Min of Land and Marine Resources, Gov TT  
Ms. Christine Chan A Shing, Director of Fisheries, TT  
Mr. Andrew Magloire, Chairman of the Forum, and CFO Dominica  
Representatives of CARICOM Member States,  
Representatives of Regional Organisations  
Members of the Media, Distinguished guests  
Ladies and Gentlemen

1. Good morning. It is indeed a pleasure for me to have this privilege of welcoming you to this workshop here this morning as a part of the celebration of CARICOM-Japan Friendship Year 2014, observing 20 years of Regional Cooperation.
2. I bring you greetings from the Management and Staff of the CRFM Secretariat. I extend a very warm welcome to all of you here today, and especially to our development partners from Japan.
3. Mr. Chairman, I would like to express my sincere gratitude to the Gov of TT for so kindly and graciously hosting us here in Port of Spain and assisting with the logistical arrangements.
4. CARICOM Japan consultations began in 1993. The benefits of the friendship are evidenced by the number of cooperative initiatives and projects covering a wide range of areas that have helped the Governments and Peoples of the CARICOM and Japan. Fisheries and sustainable use of marine resources is just one of the several areas of cooperation.
5. We are therefore very grateful for this opportunity to convey our sincere gratitude to the government and people of Japan, to reaffirm the high esteem with which we hold our relationship with Japan, and also to explore possibilities to deepen and strengthen cooperation in areas of common interest in future.
6. As we celebrate this significant milestone, I would like to recognize the substantial contribution of Japan for the sustainable development and management of the fisheries sector in the CARICOM states at both national and regional levels.
7. In fact, over the past 20 years Japan has emerged as the major contributor of development assistance for the fisheries sector at the bilateral level within the Caribbean. Japan has been providing vital and substantial support in upgrading and improving the artisanal fishing fleet; fishing ports and other shore based infrastructure for storage, processing and marketing of fish; as well as provision of training in gear technology, processing and quality assurance, resource management and conservation of fisheries.
8. Japan is currently providing funding and technical assistance to CARICOM by way of The Caribbean Fisheries Co-management Project (CARIFICO), the objective of which is to develop and strengthen examples of co-management approaches. Tomorrow we will review the progress made over the past year under this important project.

9. The fact that Japan has been willing and steadfast in contributing so generously to promote sustainable use of marine resources in the CARICOM countries, even in these challenging economic times, is in my opinion, a true reflection of the special bond of friendship and importance that Japan attaches to our relationship as well as the importance it gives to the welfare of our people and the social and economic development of our countries.
10. Japan is an Island state. But it is a developed country with a highly industrialized, technologically advanced and resilient economy, and sophisticated modern infrastructure with cutting-edge research and development capacity. We are indeed very grateful that Japan has been so willing and ready to share its immense knowledge and technology and expertise to help us to build capacity in our countries and transform our fisheries.
11. Mr Chairman, we recognize and applaud the long and outstanding tradition and commitment of Japan in the field of marine sciences and in fisheries.
12. We also recognize and applaud the significant contribution and leadership role of Japan at the international level in promoting sustainable use of marine living resources for many years now.
13. Japan like most of the CARICOM States, is surrounded by seas and oceans, from which it derives countless benefits in the form of food, employment, transportation, information, culture, and recreation.
14. The impacts of the global economic crisis and the difficult challenges our countries face for economic growth and development are well know because they affect all of us.
15. The effects of the difficult economic situation are manifested in the lives of our people, especially the poor and vulnerable, and the growing numbers of disillusioned young people, who find themselves unable to find decent jobs, take care of their basic needs or access training opportunities that would enable them to climb out of poverty and avoid anti-social behavior and the entrapment of criminal gangs and persons with evil intent.
16. Today tens of thousands across the region live in poverty. Sadly in many of our countries, poverty remains disproportionately a phenomenon among coastal and rural fishing communities.
17. The Question we have to ask ourselves is whether or not the living marine resources of Caribbean Sea and Atlantic Ocean can help us to overcome these challenges and contribute to more robust economic growth and development in the region.
18. In recent times we have been hearing a lot about Blue Economic Growth. That is, the generation of economic growth and development by harnessing and using the resources of the oceans and seas.
19. The Blue Growth concept has been receiving increasing attention by several international organizations that have recognized that it provides a basis for action to realize our sustainable development goals of food and nutrition security, creation of decent jobs, improved standards of living and quality of life of fisherfolk and their families in coastal communities that depend on the marine resources.
20. The Blue growth concept is particularly relevant to us in CARICOM because we are all small island developing states (SIDs for short) with very limited land space and natural resources but with large expanse of ocean space and marine resources.

21. The issues and challenges facing the fisheries sector have been studied, discussed and clarified in a number of regional policy documents over the past few years: These including, but are not limited to:
- The Caribbean Community Common Fisheries Policy which was reaffirmed by the COTED a few weeks ago
  - The First CARICOM Strategic Plan that was recently approved by CARICOM Heads of Government
  - The Castries Declaration on IUU Fishing endorsed in 2010
  - The Masterplan master plan on sustainable use of fisheries resources for coastal community development
  - Study on Poverty in the fisheries sector of CARICOM States
  - The regional strategy and action plan on Climate change adaptation and disaster risk management in the fisheries and aquaculture sector
  - Sub-regional Fishery Management Plan for Flyingfish fisheries
  - The strategy on the use of ICT in the fisheries sector
  - Study and 5-year Action Plan for Aquaculture Development
22. The future of CARICOM-Japan relations in fisheries should take account of these and other developments.
23. In closing, Mr. Chairman, Ladies and gentlemen, our collaboration, our relationship, our friendship with the government and people is something we treasure dearly.
24. We therefore look forward, over the next 20 years, to not just maintain this relationship, but also to strengthening and deepen it to further promote the development, conservation and sustainable use of our marine living resources, for the mutual benefit of the governments and people of Japan and the CARICOM States.

Thank you very much and may God bless you.



**APPENDIX 3, ANNEX B: ADDRESS BY THE AMBASSADOR IN THE EMBASSY OF JAPAN  
IN TRINIDAD AND TOBAGO, MR. YOSHIMASA TEZUKA.**

The Honourable **Jairam Seemungal**, Minister of Land and Marine Resources

**Ms. Sheryl-Anne Haynes**, Chairperson and Permanent Secretary in the Ministry of Land and Marine Resources

**Mr. Milton Haughton**, Executive Director, Caribbean Regional Fisheries Mechanism Secretariat

**Ms. Christine Chan A Shing**, Director of Fisheries, Ministry of Land and Marine Resources

Distinguished Guests

Members of the Media

Ladies and Gentlemen

Good Morning and compliments of the season.

It is indeed a great honour to be here this morning for the commencement of the workshop. This workshop is particularly important in the context of this year's celebration. As you may know, we have been celebrating the Japan-CARICOM Friendship year 2014, which marks 20 years since the first Japan-CARICOM Consultation in 1993. You see the official logo of the Friendship Year behind me. This logo portrays harmony and partnership between the origami crane and heliconia flower. The origami crane is iconic to Japan and connotes strong cultural representation. The heliconia flower is exotic and colourful as the territories of CARICOM. Just like this logo, our governments have been accustomed to cooperating in international fora and exchanging and sharing opinions on many important issues, including the critical sector of fisheries.

The purpose of this seminar is to reaffirm Japan's strong relationship with the fisheries sector in each country and develop the efficient use of fishing facilities in the region through knowledge-sharing. In this respect, I hope that participants will have a fruitful experience and that this seminar will contribute to the progress of sustainable fisheries in the region.

I am pleased that Japan and CARICOM member states are maintaining a good relationship, especially in the fisheries sector, which is an important sector for island nations. Japan feels an affinity with CARICOM member states as we have similar vulnerabilities, such as hurricanes and limited natural resources. We are therefore very pleased to be working with the region to promote socio-economic stability and sustainable growth across the region. Living marine resources are important for island nations and developing sustainable fishing is important for economic growth. It will also ensure that the local population has access to high-quality food sources.

Before I close, I would like to extend a special thank you to those who contributed to the successful planning and execution of this seminar. Your hard work is greatly appreciated.

Ladies and gentlemen, I truly look forward to the continuous development and success of fisheries in the CARICOM and to continued collaboration between Japan and the region to achieve such success.

Once again, it is a pleasure to have you here and I hope you fully enjoy your experience at this workshop.

Thank you.

### **APPENDIX 3, ANNEX C: ADDRESS BY THE HON. JAIRAM SEEMUNGAL, MINISTER OF LAND AND MARINE RESOURCES, TRINIDAD AND TOBAGO**

Speaking Notes

Minister of Land and Marine Resources

Thursday 4<sup>th</sup> December 2014

Hilton Hotel, Port-of-Spain

9.00 am

Opening Ceremony: Regional Fisheries Workshop.

-----  
His Excellency, Mr. Yoshimasa Tezuka Ambassador of Japan

Ms. Sheryl-Anne Haynes, Permanent Secretary, Ministry of Land and Marine Resources

Mr. Milton Haughton, Executive Director, CRFM Secretariat

Ms. Christine Chan A Shing, Director of Fisheries, Fisheries Division

International Delegates

Ministry of Land and Marine Resources officials

Members of the Media

Stakeholders, Ladies and Gentlemen

Good Morning.

It is a pleasure to be with you this morning and address such a distinguished group of professionals and leaders at the historic Opening Ceremony of the Regional Fisheries Workshop 2014.

The Caribbean Regional Fisheries Mechanism (CRFM) Secretariat is collaborating with the Japan International Cooperation Agency (JICA) and the CARIFICO Project to convene these two Regional Workshops at Beautiful scenic Hilton Hotel, Port of Spain, Trinidad and Tobago.

Today, after the opening ceremony, we will have the Regional Technical Workshop in celebration of CARICOM / Japan Friendship Year 2014. The Workshop will highlight and showcase cooperation with Japan in the sustainable use of the living marine resource to support food security, poverty alleviation and social and economic development. It will also discuss past, current and future interventions in the fisheries sector.

Tomorrow's Regional Workshop is to disseminate the results of the CARIFICO project. Participants will be representatives from the fisheries departments, other government officials, private sector representatives and regional development partners.

The Objectives of the project are to:

- i. Enhance CARICOM Japan relationship in areas of cooperation such as fisheries
- ii. Review and discuss the results of the CARIFICO project to date and determine ways forward in its implementation

The Expected Outputs from the Workshops will be:

- i. Discussion on national and regional levels of cooperation and interventions
- ii. Identifications of successes and challenges related to previous interventions
- iii. Proposals for future interventions especially against the backdrop of the Caribbean Community Common Fisheries Policy and the CARICOM Strategic Plan
- iv. Review of the results of the CARIFICO project to date and recommendations for ways forward as appropriate

Ladies and Gentlemen, Trinidad and Tobago in conjunction with the Japan International Co-operation Agency (JICA) through a Technical Co-operation Programme of the Government of Japan implemented at the national level “The Regional Fisheries Training Project” many years ago, from 1996 to 2001 and the “Project for the Promotion of Sustainable Marine Fisheries Resource Utilization in Trinidad and Tobago” from 2001-2006.

The goal of the Regional Fisheries Training Project was to enhance the technical standard of training personnel at the Caribbean Fisheries Training and Development Institute (CFTDI), the training arm of the Ministry of Land and Marine Resources. The Project focused on providing equipment to the CFTDI, training nationals in Japan in specific fields and dispatching Japanese experts to Trinidad to provide technical assistance.

The Project for the Promotion of Sustainable Marine Fisheries Resource Utilization in Trinidad and Tobago involved the Fisheries Division of the Ministry of Land and Marine Resources, the Department of Marine Resources and Fisheries of the Tobago House of Assembly (THA) and the CFTDI. The Project focused on a range of activities in the fields of:

- Capture Fishery Technology and Fishing Gear Development
- Seafood Technology and Marketing
- Marine Engineering
- Marine Fisheries Resource Management
- Fisheries Extension
- Human Resource Development and Regional Capacity Building through the Regional Technical Co-operation Promotion Programme (RTCPP).

The CFTDI benefitted tremendously from this component of the Project. They received substantial infrastructure support and equipment.

Development and implementation of Set Net Trials, experimental Diamond Back Squid Fishing, experiments on Fish Attraction Devices (FADs) and Design/Gear Modifications to Fish Pots were all completed under this component of the Project. The Results from the experimental testing of these gears was used to do analyses of the biological composition of the catch under the Resource Management component of the Project.

A Project to determine the Selectivity of Gillnets in Trinidad was also supported through the provision of technical advice from Professor Dr. Tatsuro Matsuoka, a specialist in this field. Equipment including nets was also provided to assist in the implementation of this Project. One Fisheries Officer received individual training at the University of Kagoshima in Japan under Professor Dr Matsuoka to facilitate the implementation of this Project.

In August 2003, JICA dispatched to Trinidad, Dr. Tatsuro Matsuoka an expert in the field of fishing gear selectivity recognized worldwide for his research on ghost fishing and fishing gear selectivity especially on gillnets. A total of 13 Officers were trained by Dr. Matsuoka in selectivity of Gillnets. A Technical Report on Technology Transfer on Selectivity of Gillnets was prepared.

Experimental trials were implemented in Trinidad to determine the selectivity of Gillnets. The results were used to provide scientific support for the adoption of appropriate mesh size regulations included in a Management Plan for the Gillnet Fishery of Trinidad.

The Project for the Promotion of Sustainable Marine Fisheries Resource Utilization in Trinidad and Tobago allowed for a number of assessments of commercially important fish species, analyses of

alternative gear design and identification of a number of recommendations for continued management of the specific fishery resources. It proposed the possible introduction of specific environmentally friendly fishing gears, recommended the increased use of under- utilized fish species for consumption and developed management recommendations for specific commercial fish species in Trinidad and Tobago.

The Project recommended that the introduction of a small- scale set net to the Trinidad and Tobago fisheries could be further developed with appropriate management and regulatory controls. Six small-scale set net experimental operations were carried out in Trinidad and Tobago from 2003 to 2006. The pre-condition for use of this gear is the need for fishers to collaborate. Further work in co-management arrangements and support for the establishment and operation of fishing co-operatives was therefore recommended.

These were the first trials of the set net in the Caribbean region. Once installed, a shorter time, only one to two hours was required for everyday harvesting. When the catches exceeded the harvest limit, releasing fishes into the net in good condition could easily be done. The set net may be considered an environmentally friendly fishing gear as it does not damage the fish and the daily fuel consumption is considered very low compared to other major fishing gears.

In Trinidad and Tobago, the fish pot is also one of the popular fishing gears. However, fishpots lost in the sea (derelict) continue to capture fish, a phenomenon known as ghost fishing. In order to provide solutions to this problem, experiments were conducted in Tobago using different designs and materials. An alternative fishpot design was developed that included a time-release device that would be attached to the door of the fishpot, and identified suitable bio-degradable material for the time-release device.

Stock Analyses of various commercial species including Lane Snapper, Whitemouth Croaker, and Kingfish were completed under the Project. An Assessment of the catch in the bait fishery revealed that some of these species were mature and could be taken for commercial purposes. The recommendations provided in these assessments will be used to develop management plans for each of these fisheries.

A number of publications were also developed under the Resource Assessment Component of the project including Reports of Stock Assessments, Training Manuals and Text Books.

Fourteen officers of the Fisheries Division, Ministry of Land and Marine Resources, the Department of Marine Resources and Fisheries of the Tobago House of Assembly and the CFTDI received training in Japan in specialized areas including the following:

- Coastal Fisheries Management
- Coastal Fishing Techniques for Sustainable Resource Use
- Fisheries Extension
- Analysis Techniques for Fisheries Stock Assessments

Capacity building through extensive training in Japan in the fields of aquaculture, Fish Attraction Devices (FAD) development and deployment, and fisheries extension methodologies. Five officers benefitted from this training which was rolled out to other stakeholders upon their return.

JICA constructed and equipped a Fisheries Training Center at Buccoo Point, Tobago. This facility has two (2) class rooms, an eight (8) bed dormitory, Fish Processing area inclusive of one (1) walk-in freezer, one (1) ice machine and digital scales. A fully stocked store room, gear Technology room and laundry area completes the Tobago Fisheries Training Centre.

One (1) 32' Pirogue and two (2) 75 HP Yamaha Outboard motors, one (1) hydraulic Fish trap hauler, Material for constructing a set net, Squid Fishing gears and long line fishing gears were also provided. Equipment was received for training and development of the Fishing industry in the following fields, Fisheries Extension, Fishing Technology, Marine Engineering and Fisheries Resource Management.

One (1) Mitsubishi 4x4 Pickup, One (1) overhead and multimedia Projectors, one (1) Projector screen, one (1) monitor, Laptops and desktop computers and hand held Global Positioning Systems (GPS).

One 70 HP four stroke Outboard motor Two (2) Yamaha 40 HP outboard motors, tools for effecting outboard engine repairs and work benches in Tobago.

Digital scales, Fish measuring boards, Vacuum packing machine, heat sealers and computers.

Ladies and gentlemen I can tell you all day of the many benefits to the people of Trinidad and Tobago resulting from our collaboration with our Japanese friends, but time would not permit.

My Government, The People's Partnership, is committed to continue working closely with the Japan International Co-operation Agency (JICA) to the mutual benefit of both Japan and Trinidad & Tobago.

On behalf of the Honourable Prime Minister, Ms Kamla Persad Bissessar and my government, as Minister of Land and Marine Resources, I would like to convey, through His Excellency, the Ambassador of Japan, our heartfelt gratitude for the kind cooperation and assistance to our country by the government and people of Japan.

Thank you

## **APPENDIX 4: STATEMENT BY THE CRFM / CARICOM–JAPAN FRIENDSHIP YEAR REGIONAL FISHERIES WORKSHOP, PORT OF SPAIN, TRINIDAD AND TOBAGO, 04 DECEMBER 2014**

### **Introduction**

Japan has been the major contributor of financial and technical assistance for development and sustainable use of the living marine resources in the region at the bilateral and regional levels. Japan has implemented cooperation in areas such as the restoration of hurricane damage, the development of infrastructure, the provision of equipment and fishing technology, improvement in data and information management, training and capacity building, among other areas. This work has been done primarily through the Japan International Cooperation Agency (JICA), which has been working in the region to enhance its partnerships with countries through a number of cooperation activities in the fisheries sector, which range from infrastructure development, dispatch of fisheries experts and Japanese Overseas Cooperation Volunteers / Senior Volunteer Program (JOCV / SV), provision of training in Japan and to technical cooperation projects. One of the iconic activities in the region was a technical cooperation project which started in 1996 at the Caribbean Fisheries Training and Development Institute (CFTDI) in Trinidad and Tobago. This “regional fisheries training project” provided fisheries officers in the region with training opportunities in the fields of fishing methods, marine engineering and fish processing.

In 2000, the Caribbean Community (CARICOM) Governments and Japan signed a partnership Agreement entitled “A New Framework for Japan-CARICOM Cooperation for the Twenty-first Century”. Under this Agreement, the Government of Japan provided funding and technical assistance to CARICOM Governments in several areas of economic and social development. These included among others, Trade and Investment, Education and Human Resource Development, Disaster Risk Reduction, Environment and Climate Change, Integration in the Global Economy, and Fisheries and Agriculture.

The Caribbean Regional Fisheries Mechanism (CRFM) Secretariat in collaboration with the Government of Japan, through support of the Caribbean Fisheries Co-management (CARIFICO) project, held a series of in-country, ½ day seminars, which discussed national level interventions with presentations on the successes as well as the challenges. Discussions also addressed recommendations for future national level interventions.

The series culminated with a regional fisheries workshop hosted by the Government of Trinidad and Tobago and the CRFM Secretariat, 4 December 2014, that brought together representatives from the CARICOM States to synthesize the outputs arising from the in-country seminars, consider other past and ongoing regional projects in fisheries over the past 20 years, and discuss ways of strengthening the relationship between CARICOM and Japan in promoting sustainable use and management of the living marine resources for the benefit of the people of the CARICOM States and Japan.

### **Highlights of 20 years of CARICOM-Japan Cooperation in fisheries**

The Workshop acknowledged the substantial contribution that Japan has made to the sustainable development and management of the fisheries sector in the CARICOM States at both national and regional levels during the past 20 years. Japanese assistance to the region has been diverse and has yielded numerous benefits including, *inter alia*:

- The development and expansion of trade in fish and fishery products by CARICOM Member States.
- The construction of port facilities for fishing boats, and fresh fish markets and attendant facilities,

- including cold storage, and in one case, a bus terminal.
- Training attachments of fisheries personnel in Japan, as well as the attachment of Japanese technical experts to the region to facilitate technology transfer and human resource capacity building, have made a significant positive contribution to fisheries development in CARICOM.
- One of the earliest major regional projects was a technical cooperation project started in 1996 at the CFTDI in Trinidad and Tobago. This “regional fisheries training project” provided fisheries officers in the region with training opportunities in the fields of fishing methods, marine engineering and fish processing.
- Training in Japan was also one of the highlights of Japanese assistance.
- Provision of in-country JICA expertise from as far back as 1990, up to the present, to provide technical assistance included aquaculture/mariculture; fishing gear and methods; engine maintenance; coastal fishing technology; FAD development; long line fishing technology; fish marketing and product development; and marine biology.
- JOCV volunteers also carried out community development activities that assisted fishers.

The contribution of the Government of Japan to the sustainable development and management of aquaculture and fisheries in the CARICOM countries continued with the government of Japan committing to improving the contribution of aquaculture and fisheries to the economic development of the CARICOM States by the preparation of a 3 year regional study, which prepared a Master Plan on sustainable use and conservation of fisheries resources for coastal community development.

The Government of Japan is also currently supporting a follow-up project, the CARIFICO Project, to begin implementing some of the recommendations contained in the Regional Master Plan.

#### **Scope for new interventions - emerging and future issues, and priority areas consistent with the Caribbean Community Common Fisheries Policy and the CARICOM Strategic Plan**

- Participants reviewed national and regional levels of cooperation and interventions
- Identified successes and challenges related to previous interventions
- Considered the challenges and opportunities of the CARIFICO project to date and recommendations for ways forward as appropriate
- Made proposals for future interventions especially against the backdrop of the Caribbean Community Common Fisheries Policy and the CARICOM Strategic Plan

#### **Recommendations:**

Participants of the CRFM CARICOM-Japan Friendship Year 2014 Regional Fisheries Workshop,

**Recognize** that the areas where Japan has donated its aid were areas where a need existed

**Recognize also** that CARICOM Countries and Japan shared a similar philosophy of sustainable use of marine resources

**Express concern** that USA based non-governmental entities are seeking to have a number of species that are currently the target of Caribbean fisheries classified as threatened or endangered, to the detriment of coastal communities in CARICOM Member States which rely on these resources for food security and livelihoods.

**Acknowledge** that there had been a number of challenges related to the assistance in the areas of training, equipment support and infrastructure development, provided by the Government of Japan

**Acknowledge also** that the CRFM itself has a number of challenges that impact on its ability to provide support to Member States: namely, communication, resource mobilization and diverse country situations

**Note** that the issues and challenges facing the fisheries sector have been studied, discussed and clarified in a number of regional policy documents over the past few years;

**Note also** that these policy documents include, but are not limited to:

- The Caribbean Community Common Fisheries Policy which was reaffirmed by the COTED on 10 October 2014
- The First CARICOM Strategic Plan that was recently approved by CARICOM Heads of Government
- CRFM's new Strategic Plan for 2013 - 2021
- The Castries Declaration on IUU Fishing endorsed in 2010
- The Master Plan on sustainable use of fisheries resources for coastal community development
- Study on Poverty in the fisheries sector of CARICOM States
- The regional strategy and action plan on Climate change adaptation and disaster risk management in the fisheries and aquaculture sector
- Sub-regional Fishery Management Plan for Flyingfish fisheries
- The strategy on the use of ICT in the fisheries sector
- Study and 5-year Action Plan for Aquaculture Development

**Note** Japan's philosophy of recipient ownership of international cooperation provided.

**Request** that future CARICOM-Japan relations in fisheries take account of these and other developments.

**Recommend** that,

- Future training assistance should have a built-in contractual obligation and mechanism for trainees, upon return, to undertake activities to pass on and make available the knowledge gained from the training received; this also because the beneficiaries are sometimes reluctant to utilize the knowledge gained from such training
- The direct beneficiaries of infrastructural development assistance should be involved at all levels of development including; the planning stage, the design stage, review and modification, and the final product and the implementation.
- Infrastructure development assistance should take into consideration the present and future use of those facilities

**Recognize** that

- Capacity of persons to access training is a limiting factor; this includes the number of persons available and the educational or academic competence of persons willing to be trained.
- Follow up or monitoring and evaluation of the projects/training is needed to ensure that specific objectives and goals are achieved.
- The management of the facilities after construction has been completed is critical to the realization of maximum benefits to coastal communities.
- The lifespan of projects, in some instances, is too short to allow for the impacts to be clearly seen.
- Greater transparency and inclusiveness of stakeholders in the implementation of projects would enhance outcomes and impact in the communities.

**Note** that most of the interventions by JICA were associated with the pre-harvest sector.



**Recommend** that some interventions at the post-harvest level should be considered in the way forward

**Note** the value of exchanges of expertise between and among the CARICOM countries

**Also note** the need for extension of JICA-supported interventions and dissemination of the results of pilot projects to CARICOM Member States that are not direct beneficiaries of the fisheries related activities undertaken by the Government of Japan, as a consequence of Japan's foreign aid eligibility criteria; and thus, had not already benefitted directly from project activities.

**Request** that interventions related to strengthening the fisheries extension capacity, socialization of fishers and networking between JICA training alumni should be also considered

**Note** that the Master Plan on Sustainable Use of Fisheries Resources for Coastal Community Development had a limited focus on specific sub-sectors and beneficiaries, but nevertheless, **urge** that resources be mobilized for its implementation.

**Note also** that a number of the projects already executed require further support to fully realize their potential.

**Note also** that the lifespan of projects is often too short and the project proposal and approval process is sometimes too lengthy.

**Recommend** that a number of initiatives should be considered for the future, including but not limited to:

- Obtaining baseline information of the deep slope fishing to determine the potential for this type of fishery
- Upgrade of processing and marketing facilities to support better access to local, regional and international markets
- Develop post-harvest processing facilities for small-scale fisheries
- Provide technical assistance in
  - post-harvest quality control for small-scale fisheries
  - boat building with fiber glass
  - fishing net construction and repairing
  - outboard engine maintenance and repairs
  - utilization of By-catch Reduction Devices
  - business management and marketing
- Support Aquaculture activities in general and, in particular, marine aquaculture such as, but not limited to, grouper farming, mangrove oyster farming and culture of selected ornamental species
- Support the development of cost effective sources of feed for aquaculture
- Study for potential markets for underdeveloped fisheries
- Consider support to intra-regional pelagic and/or deep slope demersal fishermen's exchange programmes, as appropriate
- Support scientific research (stock assessment) of main target species of artisanal fisheries (including for *Penaeus* species in collaboration with Guyana, Suriname and French Guiana).
- Support scientific research on invasive species such as lionfish and *Sargassum* to consider the current and long term impacts on the regional fisheries
- Facilitate continued collaboration with CFTDI and further implementation/expansion of the Basic Fishermen's Training Course
- Strengthening fishers and fishers' organization

- Capacity building of stakeholders along the industry chain is important for successful uptake of emerging new ideas and technologies
- Continued support to CARICOM Member Countries' participation in international fisheries fora.
- Support networking and information sharing on the outputs of work done under the previous 20 years of Japanese assistance, including but not limited to production of special publication(s) on the work done to date.

**Thank** the Government and People of Japan for their assistance to the fisheries sector over the past 20 years and ***look forward*** to strengthening and deepening cooperation between CARICOM States and Japan for sustainable use and management of living marine resources for the benefit of the Governments and People of CARICOM States and Japan.

## **PART II – REPORTS OF NATIONAL SEMINARS**

## **JAPAN-CARICOM FRIENDSHIP YEAR CELEBRATORY SEMINAR: BELIZE**

**CRFM Secretariat, Belize City, Belize  
28 October 2014**

On 28 October 2014, the Belize Fisheries Department held a workshop titled, *Evaluation of JICA Fisheries Projects in Belize and Future Collaboration Initiatives* at the CRFM training room in Belize City. Mr. Mauro Gongora, Coordinator of the Capture Fisheries Unit, provided opening remarks for the workshop giving a synopsis of the collaborations with JICA. Following the opening remarks, Mr. Peter A. Murray, Programme Manager, Fisheries Management and Development, CRFM Secretariat provided an overview of the purpose of the workshop and what the results would lead to.

Under the revision of the fisheries projects in Belize - Past and Current, Mr. Adriel Castañeda, Fisheries Officer provided a summary of the Coastal Fisheries Management Course that he participated in at Yokohama International Center from July to October 2013. He mentioned that the course provided fruitful insight into the management of Japan's fisheries from all perspectives including field excursions, meetings with Fisheries Management Officials, lectures on rights-based systems, market visits, and meetings with prefectural fishermen associations' management committee that provided firsthand experience and made the course more fruitful. Mr. Castaneda also mentioned that another officer was recipient of the same opportunity this year of which the Fisheries Department was thankful as it helped to build its capacity.

The other project that the Fisheries Department had been involved with was the Workshop on Capture Fishery Technology and Fishing Gear Development in 2006. This involved field testing of the deep water fishing gear showing possibilities of development of a deep slope fishery in Belize. In addition, there was deployment of diamondback squid gear in Turneffe.

During the discussion session, fishermen present at the meeting expressed that deep sea fishing was no longer feasible mainly because equipment was too expensive. They also expressed that the CPUE was not always as good as the trial was and that they believed that the fishery would collapse in a few years if more fishermen entered. There was also comment on the opportunity of pelagic species that were not being tapped but again there was the need for equipment that could also be expensive. Mr. Murray expressed that St. Lucia lands 60% of their catch via trolling while Grenada uses Cuban longline. Unfortunately, there was no follow-up with the project for the deep slope fishery.

### **Proposals for future Collaboration**

1. Deep water potential
  - a. Get the baseline information of the deep slope fishing.
  - b. Special consideration should be given to water currents that could greatly influence fishing patterns.
  - c. Fishermen informed that their deep sea fishing season was for approximately 4 months depending on the variability of the water current.
2. Upgrade of facilities (cooperatives) to gain access to better markets such as the EU.
3. Marine Aquaculture
  - a. Grouper farming
  - b. Mangrove Oyster farming
  - c. Mullet Caviarre - there is good abundance along the rivers in Belize.
4. Study for potential markets for underdeveloped fisheries.
5. Intra-regional pelagic fishermen exchange program including gear.

It was highlighted that there should be continuation of the projects that were implemented. Furthermore, projects lifespan were too short and the project proposal process too lengthy and tedious. There was expression that there was the need for transparency of the financial aspects of implementation of projects under JICA; JICA should hire a consultant to lead this.

Peter A. Murray gave closing remarks by thanking the participants. He indicated that he would most likely be in charge of compiling all the results of the workshops and presenting them in December. This would summarize what would work, what didn't and the recommendations for forward action.

## **JAPAN-CARICOM FRIENDSHIP YEAR CELEBRATORY SEMINAR: ST. KITTS AND NEVIS**

### **Old Road Fishing Complex, Basseterre, St. Kitts & Nevis 05 November 2014**

The Meeting commenced at 9.30 a.m. with a short opening ceremony which was chaired by Mr. Kharim Saddler, Fisheries Assistant, Department of Marine Resources.

Welcome and remarks were provided by Mr. Marc Williams, Director of Marine Resources, St. Kitts and Nevis and Mrs. June Masters, Statistics and Information Analyst, CRFM Secretariat (who joined the meeting via Skype).

The discussion portion of the Seminar was led by Mr. Samuel Heyliger, Fisheries Officer, Department of Marine Resources.

### **Successes**

Mr. Heyliger noted the following successes of the JICA interventions in St. Kitts and Nevis

1. Training
  - Many St. Kitts and Nevis nationals were sent to Japan to be trained in a number of fisheries related disciplines (aquaculture, engine maintenance, etc.).
  - The fisheries sector (and particularly the staff of the Fisheries Division) benefited from the various fisheries related training opportunities provided through CFTDI, through a Technical Co-operation Project (TCP) between the Government of Trinidad and Tobago and the Government of Japan via the Japan International Cooperation Agency (JICA) initiated in 1995.
  - In-country training facilitated by Japanese experts and where resources such as tools were provided.
2. Technology
  - Provision of gear technology (longline)
  - Provision of new gear technology (vertical longline for diamondback squid)
  - Technology to assist with the catching of pelagic species
  - FAD related technology (building and deploying FADs)
3. Infrastructure
  - The fisheries facilities provided at Basseterre and Old Road represent an investment of about US\$40 m
4. Equipment
  - Provision of the various equipment needed to make the fishing facilities functional (including even such things as chairs )
  - Computers
  - Cameras
  - Audio equipment (speakers)
  - Freezers, Chill
  - Vacuum Sealers
  - Vehicle

After listing the successes Mr. Heyliger invited the group to consider whether or not St. Kitts and Nevis had given anything back to Japan. The group responded that within the context that St. Kitts and Nevis shared a similar philosophy of sustainable use of marine resources St. Kitts and Nevis gave back to Japan

support at the international level (such as on the issue of whaling). The meeting also considered the allegation that Japan seeks to “buy” support with its aid money. However the meeting noted that the areas where Japan donated its aid were areas where a need existed. The meeting was also implored to care for/ to take good care of the facilities equipment and materials provided by Japan as this was a sure way to indicate thankfulness.

### **Challenges**

Mr. Heyliger discussed with the group some of the challenges and failures that accompanied Japan interventions.

#### **Challenges with regards to training**

1. In many cases persons who went to Japan to be trained did not implement what was learned.
2. Follow-up training was not provided (many times equipment and materials needed to implement training were not provided and were not available locally).
3. Trained personnel have not been passing on this knowledge to others (they have not trained others).
4. Continuous (upgraded and updated) training was not offered. For example training in maintenance and repairing of 2 stroke engines was provided when the use of 2 stroke engines was current. However 4 stroke engines were currently in use (by small number of fishers) and so there was a need to provide training in the maintenance and repair of 4 stroke engines.
5. In some cases inappropriate persons were chosen for the offered training.
6. In some cases the trained person had no outlet for the training provided, as well as no tools with which to carry out the function in which he was trained (a better understanding would develop if the skill could be practiced).
7. There was a failure in the Fisheries Administration to ensure that the transfer of knowledge from the trained personnel to those in need of the knowledge occurred. A specific person should be assigned the task of ensuring that those trained train others. (Knowledge Transfer)
8. Someone should be assigned to train the fishers. This was not an easy task as it entailed early rising and working long hours. Therefore it will take a committed person with definite interest in the area of training.
9. There was also the question of the local demand for the knowledge gained.
10. The issue of trust between the trained person and those in need of the knowledge. If there was mistrust the trainee will not be allowed or called upon to impart his or her knowledge.

#### **Challenges with regards to infrastructure**

1. In the case of the fisheries facilities provided at Old Road the infrastructure provided deviated from what was discussed and agreed to by the fishers using the facility.
2. The infrastructure seemed less than (diminished) what was asked for and agreed to by the direct beneficiaries.
3. The jetty was built differently and shorter than what was agreed to.
4. There is a ramp that seems to go nowhere.
5. A truck was provided to move slabs from the pier and lift boats but it was not usually available to fulfill the tasks for which it was given.
6. The pier is not what was agreed to by the fishers who use the facility.
7. The direct beneficiaries (the users of the facility) were consulted on the design of the facility and a design was agreed to by these direct beneficiaries, the Authorities and JICA. However changes were made to this accepted design and the direct beneficiaries were not consulted on these changes.

8. The Old Road facility was built to accommodate boats of maximum length 25ft, given that was the maximum size of boats using the area at that time (in 2005). Currently however the boats using the area are 40ft boats and the facility cannot accommodate these boats.

#### Challenges with regards to equipment

1. The fisheries facilities provided at Basseterre and Old Road were designed using the concept that Basseterre would be the primary site (the mother site), and would be the site for processing and thus would house most of the equipment (vacuum packaging equipment, a live lobster holding tank, etc.) while the Old Road facility would be secondary to the Basseterre site (a child site). Thus the Old Road site was not equipped to process fish. This concept should be reviewed to examine if it was still valid.
2. The equipment housed at the Basseterre site was deteriorating due to lack of maintenance (there are no systems for maintenance and use of the equipment in place).
3. There is limited financial commitment for the maintenance of the equipment provided to the Basseterre site. Thus funds are not always available for the purchase of spare parts or regular service of the equipment.
4. There should be a trained person located in the immediate surroundings to fix vital equipment such as the ice machines (for each complex or two trained maintenance persons).

#### Recommendations

##### Training

The general recommendation regarding training was as follows: all future training should have built into it a contractual obligation and a mechanism which stipulates that the trainee upon return to St. Kitts and Nevis will undertake activities to pass on and make available the knowledge gained from the training provided to him or her.

The meeting also called for training in the following areas:

1. Any kind of fisheries technology training.
2. Training in the use and maintenance of 4 stroke engines.
3. Training and awareness in fishing and other fisheries related jobs as a career aimed at young people, which would encourage youths to choose fishing and fish related jobs as careers.
4. Training in the fixing of the ice machines.
5. Integrating fisheries training into the curriculum of schools.

##### Infrastructure

The general recommendations with regards to infrastructure were as follows:

1. The direct beneficiaries of infrastructural development should be involved at all levels of development including; the planning stage, the design stage, review and modification, and the final product and the implementation.
2. Any infrastructure development should take into consideration the present and future use of those facilities (we should build with the future in mind).

##### Equipment

The general recommendations with regards to equipment were as follows:

1. The government should make a financial commitment to the maintenance of the equipment
2. The government should make a commitment to using the specified manuals and systems of maintenance (supplied with the equipment) when servicing or fixing the equipment provided.

##### Other concerns

Some general concerns were also raised as follows:



1. Capacity of persons to access training. The availability of suitable candidates for training was considered to be a limiting factor. This included the number of persons available and the educational or academic competence of persons willing to be trained.
2. Follow-up or monitoring and evaluation of the projects/training provided to ensure that specific objectives and goals were achieved.
3. The management of the facilities was considered critical to the realization of maximum benefits of fisheries facilities
4. The need for the right persons to be employed for the management of the facilities was emphasized.

The Meeting stated that the assistance of the Government and People of Japan to the fisheries sector of St. Kitts and Nevis was received with deep and heartfelt gratitude and thanks. It was recognized that there had been challenges along the way, but the beneficiaries were grateful for the help they had received.

The fishers present at the seminar suggested that they would like to send a written letter of thanks to the Government and People of Japan. It was suggested that this letter could be delivered at the culminating seminar in Trinidad and Tobago in December 2014.

The Meeting was adjourned at 12.27 p.m.

## **JAPAN-CARICOM FRIENDSHIP YEAR CELEBRATORY SEMINAR: SURINAME**

**SAIS Building LVV Complex, Letitia Vriesdwaan, Paramaribo  
20 November 2014**

The Meeting commenced at 9.15 a.m. with an opening ceremony which was chaired by Mrs. Yolanda Bobb-Echteld, Senior Policy Officer, Department of Fisheries. Welcome and remarks were provided by Dr. E. Rozenblad, Acting Director of Fisheries; Mr. Nariaki Mikuni, JICA Fisheries Expert; and Mrs. June Masters, Statistics and Information Analyst, CRFM Secretariat. The vote of thanks was provided by Mr. Mark Lall of the Suriname Fishermen's Association.

Mr. Mikuni provided the meeting with an overview of Japan Fisheries Projects and interventions in the region.

Mrs. Babb-Echteld provided the meeting with an overview of Japan Fisheries Projects and interventions in Suriname as follows.

### **Background on Cooperation**

SUJAFI - Following the establishment of SUJAFI in 1973, a shrimp processing plant, the cooperation between Suriname and Japan was strengthened with a co-ownership arrangement of Japanese (49%) and Surinamese (51%) private capital. SUJAFI was established to provide the processing services for three shrimping companies operating under the Japanese flag. The Japanese companies specialized in the exploitation of the deeper grounds, targeting the species *Penaeus brasiliensis* (Pink spotted shrimp). In the late 1980's Korean companies also joined SUJAFI. Joint business ventures between Suriname and Japan have continued over time, with Holsu, a private company, producing surimi, and fish meat.

JAMARC - In the period 1979 – 1981 the Japan Marine Resource Research Center (JAMARC) conducted a survey to explore the deep-sea shrimp resources in Suriname and French Guiana.

Japan's cooperation over the years has also helped to modernize the small-scale fisheries sector. For instance, shrimp from artisanal fishermen were bought and processed in Japan, and the results have been promising. In addition, several experimental trials had been conducted in fish processing, for example smoked fish and fish balls. After a few years the equipment was adopted by Stichting ter bevordering van de Visserij (STIVI) at the Fisheries Department complex. Persons were also trained in the processing techniques developed.

Through the years, Japan has donated a variety of fishing gear and outboard engines, e.g. STIVI received freezer units and an ice machine. The government of Japan also constructed two fishing centres, one in Commewijne in 1991, and the other in Paramaribo in 2007. A Japanese engineer worked in Suriname during 1993-1995, and trained many fishermen in maintenance and proper use of outboard engines. Japan also offered training opportunities to Surinamese citizens in the area of research.

Despite the Japan-Suriname cooperation opportunities afforded, Suriname has faced several challenges in maintaining the benefits. The following challenges were noted: trained persons have changed their jobs; STIVI has since closed due to improper management; continuing lack of skilled workers; a steady decrease of the catch of *Penaeus* shrimp species have placed the jointly-owned companies in financial problems; high fuel costs for fishing operations have also impacted joint venture operations, and; high costs for VMS prevent widespread usage.

## **Discussion and the way forward**

- It was pointed out that most of the interventions by JICA were associated with the pre-harvest sector. Therefore the suggestion was made, that as the way forward was considered some interventions at the post harvest level should be examined for addition to the list of items on the way forward.
- It was also noted that the small-scale fishers were dependent on the industrial fishers (industrial fishers purchase the products from the small-scale fishers) and in a bid for the small-scale fishers to become independent, they could be trained in some processing techniques (such as smoking of fish). If fishers were trained and developed the product they could initiate export for themselves.
- Mr. Mikuni pointed out to the group that most processing methodologies (even those considered to be simple such as drying, salting or smoking) required the availability of facilities, equipment and other resources. He explained that high quality fish (fish kept fresh/iced/chilled from catch to sale) would also fetch high prices simply cut and packaged, as the price would be dependent on the freshness/quality of the fish, and this type of simple processing would not need added facilities and technology (resources).
- Mr. Mikuni also pointed out that though fishers might welcome the training, fishers are sometimes reluctant to utilize the knowledge gained from such training, as engaging in another economic activity would take time and energy away from their primary activity of fishing (fishers could be reluctant to engage in processing as they would prefer to be out fishing). Perhaps the wives of the fishers could be trained in processing techniques, as the wives of the fishers usually process and sell the fish caught.
- It was also suggested that the owners (boat owners or family members) could be trained in processing techniques as well.
- It was pointed out that the biggest hurdle to overcome when trying to start up a processing enterprise or any value added activity was resources. For example, the smoking of fish requires some facilities and now the standard is that the fish must be smoked with gas and not wood. Therefore training is welcomed, but after the training is provided, facilities (resources) will also be needed whereby the processing could occur.
- Marketing opportunities and market standards should be investigated and communicated to the fishers as well.
- It was suggested that some effort be placed on developing sustainable markets which accepted fish products at the standard to which Suriname was able process.
- It was also suggested that the marketing of fish from Suriname be taken in stages. Where the different markets (the US, the EU, the Caribbean and the Suriname tourist markets) are developed separately, such that entering different markets could be a progressive/step by step activity. For example, satisfying and meeting the standards of the Suriname tourist market could be the first market to be realized, then next Suriname could look to meeting the standards of and satisfying markets in the region. Following that Suriname could strive to meet the higher standards of progressively more stringent markets, and eventually Suriname will meet the standard set by the US and EU markets (EU being the more stringent of the two).
- The Meeting noted that Suriname was currently not exporting smoked fish to the EU market. It was also noted that the traditional method of smoking fish in Suriname was not acceptable in markets outside of Suriname. An explanation for these challenges was sought.
- The Meeting was informed that smoked fish from Suriname did not meet the EU standards in terms of the technology used to smoke the fish and the levels of polycyclic aromatic hydrocarbons found in the fish (levels are too high and needs to be reduced). The technology to smoke the fish was needed but this was very expensive.
- A query was raised whether or not Suriname would consider looking at other markets for smoked fish; other markets where Suriname's smoked fish would meet those standards. The meeting was informed that though the EU fish market standard was quite stringent, the standard for the levels of

polycyclic aromatic hydrocarbons might not be any different from those set by the EU market. The meeting noted that the local market for fish and fish product was small and thus small-scale fishers were hopeful that the export market for fish would be available to absorb the fish produced. However if small-scale fishers are to access the export market then the fish handling/processing infrastructure available to small scale fishers must be upgraded. The Meeting made a general call for an increase in the number of processing facilities available to small scale fishers. There was also a call for fish processing training facilities for small-scale fishers.

- A query was made concerning the types of aquaculture collaborations that were available or possible under Japan /CARICOM cooperation. The JICA representative indicated that basic aquaculture training in Japan could be provided. The Suriname representative further elaborated that the species that Suriname was interested in developing were species from the ornamental sector in particular carp species. The JICA representative indicated that Japan could provide basic training in aquaculture however training linked to carp and other ornamental species would not be available in Japan.
- On the matter of co-management, it was noted that although Suriname tried in the past to develop fisherfolk organizations currently there was only one fisherfolk organization that was functioning (two fisherfolk organizations existed, but only one was functioning). There was a call for the Government to make a concerted effort to work with the private sector to build fisherfolk organizations. It was also suggested that there should be designated personnel at the Fisheries Division or the Ministry focused on helping fishers to organize themselves. Presently what obtains is that any of the Fisheries Officers could be asked to assist with fisherfolk organization, but perhaps there should be a focal point.
- The meeting was also informed that boats were not accepted as guarantee for loans at the commercial banks. However in Suriname there was a special line of credit set up for the agriculture sector; Agriculture Credit Fund (AKF). As the fund was set up for all the agriculture sectors, specific components of the sector (e.g. poultry farmers and fishers) may find that the terms and conditions should be customized to suit their mode of operation. Fishers were asked to come together and decide whether or not the Agriculture Credit Fund as it is now served them well. Fishers were asked to inform the Government of changes necessary to make the fund relevant to their needs.

### **The Way Forward**

- Scientific research to be conducted for *Penaeus* species in collaboration with Guyana and French Guiana.
- Scientific research (stock assessment) of main target species of artisanal fisheries.
- Technical assistance with Bycatch Reduction Devices.
- Surinamese fishermen would appreciate technical and financial support from the Overseas Japan Cooperation.
- Technical assistance on post-harvest (processing techniques and quality control).
- Possibilities for establishing fishing centers in Saramacca and Nickerie.
- Establish a training center in Paramaribo.
- Processing facilities for small-scale fisheries.
- Strengthening fishermen and their organizations.
- Capacity building for public and private sector.
- Technical assistance of boat building with fiber glass.
- Technical assistance in fishing net construction and repairing.
- Technical assistance in aquaculture.

### **Recommendations to make interventions more meaningful**

- A set of prerequisites for training.
- Strong competent fishermen's organizations by implementing the rules and regulations, raising awareness (government and fishers) and building a structure for the organization, building strong partnerships between fishers and government by law and improving the by-laws of fisherfolk organizations.
- Look at empowering fisherfolk organizations on the basis of benefits to fishers and the responsibilities of fishers to pay for those benefits.
- Improvement in data collection and analysis.

**JAPAN-CARICOM FRIENDSHIP YEAR CELEBRATORY SEMINAR: ST. VINCENT AND  
THE GRENADINES**

**Fisheries Division, Kingstown, St. Vincent & the Grenadines  
24 November 2014**

Diplomatic relations between St. Vincent and the Grenadines and Japan were established in 1980. Japan is a major donor to the development of the fisheries sector of St. Vincent and the Grenadines.

**Interventions and Projects Provided to St. Vincent and the Grenadines by Japan/JICA**

1. The building and equipping of Fisheries Complexes/Centers
  - i. Kingstown Fisheries Complex and Bus Terminal in 1988 and Renovation of the Kingstown Fish Market – 2005. These premises house the Fisheries Division, the Kingstown Fish Market, jetty(ies) for fish landing. The Fisheries Division now has a conference room and a quality assurance unit with wet and dry laboratory facilities.
  - ii. Barrouallie Fisheries Center
  - iii. Chateaubelair Fisheries Center
  - iv. Owia Fisheries Center
  - v. Union Island Fisheries Center
  - vi. Canouan Fisheries Center
  - vii. Bequia Fisheries Center
  - viii. Calliaqua Fisheries Center
2. Provision of equipment for the Fisheries Centers  
The fisheries centers were provided with ice-making machines and other equipment to make the centers functional.
3. Provision of an engine maintenance and training center – established in 1989
4. The provision of fishing vessels which include:
  - 5 Tuna long liners (43 ft) named: *Black Jack*, *Tri Tri*, *Kitty*, *Albacore* and *Blem*
  - Macaboro, a (38ft) multipurpose fishing vessel
  - 4 Martinique type pirogues
  - 1 Double Ender: Dodger
5. Provision of motor vehicles
  - 2 Insulated Trucks
  - 1 Crane vehicle
  - 4 Pickup Trucks
6. JICA Training - Japan (trainees)
  - i. Fishing Gear and Methods and Extension Methodology (Mr. Angus Dennie, Mr. Hyrone Johnson, Ms. Shermaine Glynn-Johnson, Ms. Jennifer Cruickshank-Howard and Mr. Samuel Hazellwood)
  - ii. Engine Repairs and Maintenance (Mr. Reshevski Jack, Mr. Keith Howard (private sector))
  - iii. Fisheries Co-operative course (Mr. Clyde Robinson)
  - iv. Fish Quality Assurance (Mr. Franklyn Murphy)
  - v. Maintenance of Refrigeration Systems for Caribbean Countries (Mr. Lorenzo George and Mr. Ernie Brackin)
  - vi. Coastal Fishing Techniques for Sustainable Resource Use (Mr. Travon Ferary and Mr. Ayodele Adams)
  - vii. Fisheries Extension Officers in Island Countries (Mr. Hyrone Johnson and Mr. Shamal Connell)

- viii. Maintenance of Electrical Control (Mr. Lorenzo George)
- 7. JICA Training – CFTDI
  - i. Fish Handling and Processing
  - ii. Engine Repairs and Maintenance
  - iii. Fishing Gear and Methods
  - iv. Fish Quality Assurance
  - v. Fish Handling and Processing, Preservation and Cooking Technology
  - vi. Maintenance of Refrigeration Systems for Caribbean Countries
  - vii. Coastal Fishing Techniques for Sustainable Resource Use
  - viii. Fisheries Resource Management
  - ix. Four Stroke Engine Maintenance
- 8. JICA Experts serving St. Vincent and the Grenadines
  - Mr. Masatoku Kawaguchi (1990) - Aquaculture and mariculture
  - Mr. Yukichi Kimura (1993-1995) - Fishing Gear and Methods
  - Mr. Teruo Mita (1994-1996) - Engine Maintenance
  - Mr. Motoki Fujii (1995-1997) - Diamondback Squid; Coastal Fishing Technology; FADs development in 1990s
  - Mr. Hajime Fukagawa (1998-2001) - Product Development; Tuna canning; Whale and Blackfish smoking
  - Mr. Senga (1992-1993) - Introduced tuna longline fishing to fishers
  - Mr. Takahumi Toshihara (2001-2011) - Fish Marketing and Product Development
  - Mr. Nariaki Mikuni (2011- present) - Senior Fisheries Expert (JICA) CARIFICO Project
  - Mr. Mitsuhiro Ishida (July 2013- Present) - Marine Biologist working with CARIFICO
- 9. JICA Volunteers Worked with fishers in Barrouallie, Owia, Chateaubelair, Calliaqua, Kingstown.
- 10. Community Development Activities and facilitated “Japan Day” during the Fisherman’s Month Celebrations.
- 11. Studies and community based projects
  - i. Study on the Formulation of a Master Plan on the Sustainable Use of Fisheries Resource for Coastal Community Development in the Caribbean - Overview of Fisheries sector; identified key issues for coastal resource management: e.g. utilizing large pelagic resources to save inshore resources; FAD Development, research on diamondback squid fishing, research on flyingfish processing and marketing.
  - ii. Caribbean Fisheries Co-Management Project (CARIFICO) – targeting the FAD Fisheries and specifically Co-Management in the FAD Fisheries.

### **Scope for Future Developments**

Future developments in the fisheries sector of SVG will be improved by: quantity, fish quality, education and training.

1. Fishing needs to be looked at as a business and, therefore, fisheries related subjects and programs should be introduced and taught in the schools as new careers and opportunities. Holistic training encompassing all aspects of the industry; fishers exchange programmes, new technologies should be taken into account e.g. FAD fishing techniques, refrigeration technology, institutional strengthening for the Fisheries Division, NFO, fishers, Co-operatives Department and other stakeholders.
2. Upgrading of fisheries facilities
  - i. Machinery – focus on energy efficient equipment to minimize high electricity cost. Alternative energy source should be considered – solar, etc.
  - ii. With regards to the infrastructure, good quality materials and products should be used for example, salt air resistance products and materials.
  - iii. Spare parts availability – often spare parts are difficult to obtain.

### **Recommendations for Future Developments**

- i. Product Development Certification - to meet international standards - HACCP and US FDA.
- ii. Monitoring and Evaluation of the Industry.
- iii. Performance – Succession Planning.
- iv. Project Planning.
- v. Repairs and Better Management of Fisheries Facilities – yearly government budget allocation.
- vi. Succession Training.



## **JAPAN-CARICOM FRIENDSHIP YEAR CELEBRATORY SEMINAR: DOMINICA**

**Garraway Hotel Conference Room, Dominica  
03 December 2014**

The Dominica National Seminar was held on 03 December 2014. A short opening ceremony was followed by a number of presentations. The major highlights of the seminar were the following points.

### **A History of Cooperation in Fisheries Development: Japan – Dominica**

Diplomatic relations between Dominica and Japan were established in 1978. A number of infrastructure development and training opportunities were offered in the early stages of the relationship, and Japan has continued to provide infrastructural improvements and training opportunities to Dominica.

1. Infrastructure Developments
  - i. Roseau Fisheries Complex - built 1994-1995, renovated 1998-2000
  - ii. Marigot Fishing Port Facility - built 2003-2004
  - iii. Portsmouth Fisheries Facility- built 2010-2011
2. Technical Expertise and Overseas Volunteers
  - i. Ryutaro Ueoka
  - ii. Kazumi Iida (2003-2005)
  - iii. Mitsuhiro Ishida
3. Japanese Overseas Cooperation Volunteers
  - i. Naomi Hosoe - Culinary Arts; Adult Education and Fisheries 2006-2008
  - ii. Tanno Daisuki - Statistics; Fisheries (Marigot) 2005-2006
  - iii. Yuko Murohashi - Marketing and Fish Product Development 2009
  - iv. Tetsuya Miyahara - Statistician; Fisheries 2010-2013
  - v. Senda - Culinary Arts; Adult Education and Fisheries 2010-2012
  - vi. Yuka Kakushita - Marketing and Fish Product Development 2013
  - vii. Takaharu Matsuura - Statistician; Fisheries 2013
4. Training for Dominicans - courses in Japan
  - i. Coastal Fishing Training and Extension (1997)
  - ii. Planning for Fisheries Community Development
  - iii. Coastal Fishing Techniques for Sustainable Resource Use
  - iv. Fisheries Resource Management
  - v. Rural Development in Fisheries
5. Training courses in Trinidad (CFTDI)
  - i. Fishing Methods: Pelagic Longline and Pot Fishing (1995)
  - ii. Fishing Technology (1998)
  - iii. Marine Engineering
  - iv. Fisheries Resource Management Measures (2006)
  - v. Marine Fisheries Resource Management
  - vi. Marine Fisheries Resource Management and Biostatistics for Fisheries Science Using SPSS
  - vii. 4 stroke engine training course (2014)
6. Research Facilitation

- i. Fisheries Industry Census - 2008 and 2011- first-ever industry-wide socio-economic studies of the fisheries sector
  - ii. Fisheries Data Improvement –
    - Fish Catch and Effort Data Forms Improvement (CARIFICO)
    - Fisherman ID Card System Upgrade (CARIFICO)
    - Mapping Boats at Landing Sites (Tetsuya & Taka)
    - Sonar Mapping of Fishing Grounds (Tetsuya)
  - iii. Ghost Fishing and Biodegradable Panels - Project to study the impact of ghost fishing in Dominican waters
7. Exploratory Fishing - Diamondback Squid  
The project started in 2000 and continues to date. The project provided for procurement of squid fishing equipment and funded research trips.
8. Ice Box Promotion  
Undertook a project to build iceboxes on vessels, in support of promoting icing of fish at sea.
9. Provision of equipment – vessel, computer, etc.
10. Product Development
- i. Fish Queen – Fish cooking competition
  - ii. Financial Assessment for Fisheries Co-operatives
  - iii. Market survey for development of fish market outlets
11. Basic Fisherman Training Course  
Development and Printing of 2 Editions of the BFTC Training Manual
12. Regional Projects  
Dominica was a part of the regional project; Study on the Formulation of a Master Plan on the Sustainable Use of Fisheries Resource for Coastal Community Development in the Caribbean
13. International Solidarity
- i. International Whaling Commission (IWC)
  - ii. Convention on the International Trade in Endangered Species (CITES)
  - iii. FAO Committee on Fisheries (COFI)
  - iv. World Trade Organization (WTO) – Trade Subsidies

### **The Way Forward**

A number of recommendations were made for moving forward with cooperation between Japan and CARICOM Member States, with particular regard to Dominica.

- i. Strengthen and increase cultural exchanges between our countries. Formalize the JOCV program with an office established in Dominica. Increase the number of Dominican students and professionals visiting Japan for short-term and long-term training.
- ii. Explore the potential for narrowing the imbalanced trade gap between the countries through the development of niche markets for some of our local products (pepper sauce, coffee, ginger, etc.).

- iii. Continue to promote collaboration at international forum for the mutual benefit of our countries, particularly in the area of fisheries (COFI, CITES, IWC, etc.).
- iv. Continue to support the fisheries sector in the areas of infrastructure development, resource management, fisherfolk organizational development and facilitation of our attendance to relevant international meetings, conventions, etc.

## **JAPAN-CARICOM FRIENDSHIP YEAR CELEBRATORY SEMINAR: JAMAICA**

**Medallion Hall Hotel, Kingston  
21 January 2015**

The Japan-CARICOM Anniversary Seminar was held in Kingston, Jamaica on 21 January 2015, against the backdrop of 20 years of cooperation between Japan and the CARICOM region.

Seated at the Head Table were:

- Mr. Donovan Stanberry, Chairman, Permanent Secretary, Ministry of Agriculture and Fisheries
- Hon. Luther Buchanan, Minister of State, Ministry of Agriculture and Fisheries
- His Excellency, Ambassador Yasuo Takase, Embassy of Japan, Jamaica
- Mr. Nariaki Mikuni, Senior Fisheries Expert, JICA
- Mr. Kenji Tobita, Resident Representative JICA, Jamaica
- Lt. Commander Paul Wright, Chief Executive Officer, Fisheries Division
- Mr. André Kong, Director of Fisheries

Permanent Secretary in the Ministry of Agriculture and Fisheries, Mr. Donovan Stanberry, in his welcome reaffirmed the debt of gratitude which the Government and people of Jamaica and indeed, the entire region, owed to Japan for its ongoing contribution to the sustainable development of our respective fisheries sectors, which spanned two decades.

In bringing greetings on behalf of Ambassador Irwin LaRoque, CARICOM Secretary General, and the management and staff of the Caribbean Regional Fisheries Mechanism, Executive Director, Mr. Milton Haughton lauded the Japanese for sharing their cutting-edge technological capability to build capacity in developing countries across the globe. He also praised them for their leadership role at the international level, in promoting sustainable use of marine life for food security and economic growth. Japan's support, he added, had not only been provided directly through JICA, but also through multilateral agencies such as the Food and Agriculture Organization of the United Nations, the FAO, and a number of regional fisheries management entities.

His Excellency Ambassador Yasuo Takase, in addressing the group, pointed out that the mounting threats posed by climate change, global warming, rising sea levels, and other anomalies of nature, should heighten our awareness of the fragility of our environment, and the need to harness our marine resources for food security, and the livelihoods of our people. As a long standing development partner, the Ambassador stressed that these imperatives of self-sufficiency and economic empowerment have always been at the core of his Government's assistance programmes. In closing, he highlighted that the recommendations of the 14-point Action Plan adopted at the Regional Commemorative Workshop, held in Port of Spain in December 2014, underscored the need for continued support to CARICOM member countries for their participation in international fisheries, as well as other critical initiatives in the fisheries sector. "Let us look towards another 20 years and more of successful Japan-CARICOM cooperation in the fisheries sector", he said. "May we succeed in our important endeavours and may we do so together!"

Minister of State in the Ministry of Agriculture and Fisheries, the Honourable Luther Buchanan, in delivering the keynote address, stressed that the bilateral relations between Japan and CARICOM have been invaluable to the strategic growth initiatives to increase the production of both marine and aquaculture fisheries. Citing the formulation of the *Master Plan for the Sustainable Use of Fisheries for Coastal Development in the Caribbean* in 2009/10, the Minister noted that one of its critical outcomes was the development of a Regional Aquaculture Network with "fellow CARICOM member states".

Among the other Jamaica-based, Japanese-funded projects he highlighted were: the *Improvement of Subsistence and Small-Scale Tilapia Farming Activity through Extension and Training*; and the construction of the Whitehouse Fishing Complex in Westmoreland.

Jamaica for its part, he said, is seeking to exploit areas in which it has a distinct competitive advantage, such as the quality of its fisheries resources. “We therefore welcome all the support and collaboration that can help us achieve these goals”.

Regarding the development of value-added products, the Minister said the Government is seeking assistance from Japan in exploring the potential pharmaceutical benefits that can be derived from fish trimmings.

## **SUMMARY OF PRESENTATIONS**

### **RECAP OF JAPANESE COOPERATION PROJECTS – *Presenter: Mr. Junior Squire, Senior Fisheries Officer, Jamaica***

These are among the projects from which Jamaica benefited between 1998 and 2010, and they represent assistance in the areas of infrastructural development, human capacity building and technology transfer.

- Establishment of the Whitehouse Fishing Complex – 1998 -1999
- Training in the Management of Fishing Port and Marketing Systems (Japan) – 2000
- Caribbean Fisheries Training and Development Institute Cooperation - 2001-2006
- Caribbean Maritime Institute Cooperation -2001, 2006
- Formulation of the Master Plan for Sustainable Use of Fisheries Resources for Coastal Community Development in the Caribbean -2009
- IICA /Japan Data Improvement Project (Japan) 2009, 2010
- Training in Coastal Fishing Techniques (Japan) 2009, 2010

#### **The Whitehouse Fishing Complex**

This complex was the first modern fish-handling facility for small-scale fishers to be constructed in Jamaica. It is equipped with a jetty; an engine repair shop; a fish-handling area; a gear locker facility; and an electronically controlled waste water management system.

#### **Training in Management of Fishing Port and Marketing Systems (Kanagawa International Fisheries Training Institute, 2000)**

This six (6) week training course was a follow-up to the construction of the Whitehouse Fishing Complex. Among the areas addressed were: institutional arrangements and Fishing Cooperative Management.

#### **The Caribbean Fisheries Training and Development Institute, Trinidad and Tobago (2001-2006)**

Hosted training modules in: Outboard Motor Repair and Maintenance; Seafood Technology and Marketing; Capture Fisheries and Fishing Gear Technology; Marine Fisheries Resource Management; and Institutional Arrangement for Protected Areas.

#### **Regional Master Plan for the Sustainable Use of Fisheries Resources for Coastal Community Development in the Caribbean -2009**

The Regional Master Plan was developed to assist coastal communities in CARICOM member states. Jamaica benefited from the *Pilot Project to Improve Small-scale Tilapia Farming Activity through Extension and Training (2010-2011)*, which was one of the outputs that guided the development of the Master Plan. The pilot project had two (2) components:

- local training of small-scale and subsistence fish farmers to improve production practices, as well as the provision of micro-credit programmes; and
- regional training for officers of the Caribbean Regional Fisheries Mechanism in project management and development.

**JICA-CARIBBEAN MARITIME INSTITUTE COOPERATION – *Presenter: Dr. Fritz Pinnock, Executive Director (CMI)***

With the increase in the number of fishers over the years, over-fishing in shallow waters continues to be a concern in Jamaica. To address this, the Government of Japan proposed an alternative - deep water fishing to harvest Diamondback squid; and an association was formed between the Japan International Cooperation Agency (JICA) and the Caribbean Maritime Institute in 2004.

The JICA-funded Caribbean Fisheries Training Development Institute in Trinidad and Tobago conducted a workshop on Diamondback squid harvesting in 2004, which was attended by representatives from the Fisheries Division and the Caribbean Maritime Institute.

JICA also hosted a deep-sea fishing workshop and conducted trials in conjunction with the Fisheries Division and Caribbean Maritime Institute personnel to harvest Diamondback squid, in an effort to identify possible habitats.

Exploratory fishing expeditions continued island wide; and in collaboration with JICA and fishers from Port Royal in Kingston, Whitehorses in St. Thomas and Whitehouse in Montego Bay - the first Diamondback squid was landed in St. Thomas in January 2005.

While individuals and various organizations initially showed interest, due to lack of investment, there has been no advancement in the programme.

**Other Technical Co-operation Initiatives**

- Training in Tuna harvesting and handling
- Donation of two fully equipped vessels to the Institute
- Training in Marine Engine Maintenance
- Training in state-of the-art fisheries technology

**REGIONAL TECHNICAL COOPERATION IN HUMAN CAPACITY BUILDING**

**Seafood Technology and Marketing Course – *Presenter: Mr. Paul White, Regional Extension Officer, Aquaculture Branch, Fisheries Division***

Venue: Caribbean Fisheries Training and Development Institute (CFTDI), Chaguaramas, Trinidad and Tobago.

The three (3) week course, comprising classroom sessions, hands-on demonstrations and field trips to some of the leading fish processing plants in mainland Trinidad and the island of Tobago, was attended by participants from the CARICOM Region.

**Topics Covered**

- Seafood Handling
- Quality assurance and control of seafood
- Organoleptic evaluation of frozen seafood
- Storage of tropical fish in ice

### **Value-Added Products Made**

- Fish Sauce
- Fish Sausage
- Smoked Fish
- Dried Salted Fish

Among the areas underscored during the sessions, were the importance of product presentation and strategies to boost your competitive advantage in a globalized market.

### **Smoked Tilapia**

In an effort to increase the appeal of fresh water fish among Jamaicans, from the exposure gained at the *Seafood Technology and Marketing Course*, a team from the Ministry of Agriculture and Fisheries Aquaculture Branch has developed a ‘Cold-Smoked’ Tilapia, using low cost technology. The *Smoked Tilapia is showcased annually at Denbigh*, and is now a highly ‘sought-after’ treat at agricultural shows and expositions island-wide.

### **JICA FISHERIES COOPERATION PROGRAMMES – THEIR APPROACH *Presenter: Mr. Nariaki Mikuni, JICA Senior Fisheries Expert***

Mr. Mikuni highlighted that at the fourth Japan-CARICOM Ministerial Conference held in Tokyo in November 2014, his Foreign Minister had pledged Japan’s support in continuing to extend its cooperation to alleviate the challenges affecting CARICOM member states, by making available Japanese technologies and expertise.

### **JICA’S Fisheries Goal**

Their goal he explained was two-fold:

- fish marketing for profitable use of fishery resources; and
- fish management for sustainable use of fishery resources.

### **Essential to Achieving these Goals were:**

- appropriate infrastructure;
- technology;
- targeted policy and strategy; and
- functional organizations.

### **Infrastructure**

JICA provides infrastructure in the form of fishing boats, ice-making machines, freezers and fish processing facilities as grants-in-aid.

### **Technology Transfer**

Training in state-of-the art technologies, maintenance of equipment, fish processing and quality control, is made available through hands-on courses in Japan.

### **Policy and Strategy**

Policy formulation and strategic management are addressed by consultants who provide technical assistance.

### **Organizations**

The collaboration among supporting organizations such as Fisheries Departments, Fishermen’s organizations, the Caribbean Regional Fisheries Mechanism and CARICOM, is facilitated by CARIFICO.

### **What is CARIFICO?**

- The Caribbean Fisheries Co-management Project (CARIFICO) is a joint collaborative venture among Caribbean Regional Fisheries Mechanism (CRFM) member countries, the CRFM Secretariat, and JICA.
- The project was initiated in May 2013 for a five- (5) year period.
- Its purpose is to establish prototypes of fisheries co-management.
- Fish Aggregating Devices (FADs) are selected for the pilot activities.
- The pilot activities are carried out in six (6) Eastern Caribbean countries where FADs are used, and the outputs of the pilot activities will be disseminated throughout the Caribbean region.

### **CHALLENGES FACED BY THE AQUACULTURE SECTOR IN JAMAICA & RECOMMENDATIONS – *Presenter: Professor Vincent F.W. Wright***

Jamaica produced a total of 7,500 metric tons of Tilapia in 1997 and at that time reaped good rewards from export sales. However, since then, there has been a steady decline in production, trending down to 500 metric tons in 2013.

#### **Government policies cited as inhibiting growth of the aquaculture sector are:**

- land policy;
- the duty Regime on imported raw material for aquaculture;
- importation of Tilapia whole fish;
- acquisition of water; and
- lack of available funding for sustainable development.

#### **Challenges**

**Feed** - There is a growing demand for quality feed. The local feed manufacturer produces only pelleted feed, which lacks the required nutritional content to foster desired growth rates.

**Quality Control** - With food safety issues taking centre stage globally, consumer pressure has forced many governments to impose stricter quality assurance requirements on fish products entering their ports. Here in Jamaica the regulations are less stringent, leading to unfair competition from inferior imports.

#### **Social Issues/Praedial Larceny**

Aquaculture is largely labour intensive. The decline in production has reduced employment opportunities and stepped up the incidence of praedial larceny.

- Two of the largest fish farms in Jamaica (Trans-global and Caribbean Aquaculture) have gone out of production because of poor recovery rates of fish.
- A number of small farmers have refused to produce fish because of prohibitive losses due to theft.

#### **High Production Costs**

Aquaculture production is highly capital intensive. The spiraling cost in the following areas is making it more and more difficult for farmers to remain financially viable – hence the decline in the sector:

- energy and water charges;
- cost of feed;
- transportation costs;
- interest rates; and
- security costs.



### **Market Trends**

There are a number of countries that can produce fish more cost-effectively than Jamaica. As a result, imported Tilapia can be sold at a cheaper rate than the locally produced product. While in many instances the quality of the Jamaican Tilapia is superior, in a contracting economy, price rules.

### **Lack of Training**

Most farmers in the industry are untrained, and as such they are unable to embrace the latest technologies in what is a highly technical operation.

### **RECOMMENDATIONS**

These are among the recommendations to increase production efficiency to a level that will allow the industry to recoup.

- Improve the local Tilapia industry by introduction of a high quality fish feed.
- Set minimum standards for safety and quality assurance, and ensure that these standards are effectively applied throughout the industry.
- Provide training in proper handling of fish products and production.
- Conduct research in fish technology to improve post-harvest handling practices.
- Explore the possibility of fiscal incentives to private sector entities that engage in value-added processing.
- Make quality water available to fish farmers in adequate quantities.

### **Apply grant funding for research in these areas**

- Nutrition
- Genetics
- Hatchery management
- Environmental impact assessment
- Water quality
- Solicit funding for a *National Promotional Marketing Campaign* for aquaculture production in Jamaica
- Strengthen existing initiatives to curb praedial larceny on fish farms
- Seek funding to make available low interest loans or grants to fish farmers to recapture the competitive advantage Jamaica once held

### **JICA SUPPORT PROGRAMME SUMMARIZED – *Presenter: Mr. Kenji Tobita, Resident Representative***

#### **Government to Government Cooperation**

- JICA Overseas Volunteer Programme
- Japan-based Training Programme
- Follow-up Cooperation
- Technical Cooperation
- Grants-in-Aid
- Yen Loans

#### **Priority Sectors of Cooperation**

- Environmental/ Disaster Risk Management
- Vitalization of Economies and Expansion of Employment Opportunities
- Strengthening Productivity of Small and Medium Enterprises
- Human Capacity Building

**Japan Overseas Senior Volunteer Programme**

Over three hundred (300) senior volunteers have been dispatched to Jamaica since 1989 to work in varied areas including: Environmental Education, Community Development, Administrative Services, Disaster Preparedness, IT, Physical Education, Handy Craft, and Japanese Language Education.

**JICA Senior Volunteers**

Forty-four (44) senior JICA volunteers have been assigned to Jamaica since 2001, to work in Government Ministries, Departments and Agencies, in the fields of Business Consulting, Disaster Preparedness, Civil Engineering, textile design and wooden manufacturing.

**Japan-based Training Programmes**

Some 500 Jamaicans have participated in training programmes in Japan since 1977.

### **CRFM**

The CRFM is an inter-governmental organisation whose mission is to “Promote and facilitate the responsible utilisation of the region’s fisheries and other aquatic resources for the economic and social benefits of the current and future population of the region”. The CRFM consists of three bodies – the Ministerial Council, the Caribbean Fisheries Forum and the CRFM Secretariat.

CRFM members are Anguilla, Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago and the Turks and Caicos Islands.

