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## **WESTERN CENTRAL ATLANTIC FISHERY COMMISSION**

**Report of the**

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### **CLIMATE CHANGE ADAPTATION IN THE EASTERN CARIBBEAN FISHERIES SECTOR (CC4FISH) LAUNCHING WORKSHOP Barbados, 7–9 February 2017**





## **WESTERN CENTRAL ATLANTIC FISHERY COMMISSION**

Report of the  
Climate Change Adaptation in the Eastern Caribbean Fisheries Sector (CC4FISH)  
Launching Workshop

Barbados, 7–9 February 2017

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS  
Subregional Office for the Caribbean  
Bridgetown, 2018

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## **PREPARATION OF THIS DOCUMENT**

This is the report of the Climate Change Adaptation in the Eastern Caribbean Fisheries Sector Project (CC4FISH) launching workshop, organized by the Food and Agriculture Organization of the United Nations (FAO) and the Global Environment Facility (GEF), and held in Bridgetown, Barbados from 7 to 9 February 2017.

The launching workshop was hosted by the FAO Subregional Office for the Caribbean (SLC) and moderated by Mr Raymon van Anrooy, Secretary of the Western Central Atlantic Fishery Commission (WECAFC). Technical coordination and facilitation for the workshop was provided by Ms Iris Monnereau, Regional Project Coordinator. Administrative and logistical support was provided by WECAFC, and coordinated by Ms Celestine Moe, Administrative and Operations Support for the CC4FISH project.

The launching workshop was made possible with support from the GEF Special Climate Change Fund (SCCF), which provided the necessary funding. This report constitutes a summary of the workshop's presentations, discussions and conclusions.

**FAO Western Central Atlantic Fishery Commission.** 2018.

*Report of the GEF/FAO Climate Change Adaptation in the Eastern Caribbean Fisheries Sector Project launching workshop. Bridgetown, Barbados, 7–9 February 2017.* FAO Fisheries and Aquaculture Report No. 1189. Rome, Italy.

#### **ABSTRACT**

The FAO/GEF-funded CC4FISH launching workshop was held in Bridgetown, Barbados, from 7 to 9 February 2017. This was the first meeting of the CC4FISH Project and brought together 27 representatives from the Member Countries, partner organizations and other key stakeholders involved in the delivery of the project, to ensure that there was a common understanding of the project's objectives, inputs, outputs, outcomes and planned activities, as well as the roles and responsibilities of all project partners. The administrative and operational management arrangements established by FAO, together with the monitoring and evaluation and financial reporting processes, were discussed and agreed upon. All project partners developed and presented their annual work plans and budgets (AWP/B) for the implementation of field activities designed to ensure increased resilience and reduced vulnerability to climate change impacts in the Eastern Caribbean fisheries sector.

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## ABBREVIATIONS AND ACRONYMS

AWP/B	Annual work plan and budget
BH	budget holder
CANARI	Caribbean Natural Resources Institute
CARICOM	Caribbean Community and Common Market
CC4FISH	Climate Change Adaptation in the Eastern Caribbean Fisheries Sector Project
CCCFP	Caribbean Community Fisheries Policy
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CDEMA	Caribbean Disaster Emergency Management Agency
CERMES	Centre for Resource Management and Environmental Studies
CIRP	Caribbean ICT Research Programme
CLME+	Caribbean Large Marine Ecosystem
CNFO	Caribbean Network of Fisherfolk Organisations
CRFM	Caribbean Regional Fishery Mechanism
DRM	Disaster Risk Management
EAF	Ecosystem Approach to Fisheries
EWERS	Early Warning Emergency Response System
FAD	fish aggregation device
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environmental Facility
GCF	Green Climate Fund
ICT	information and communications technology
IUU	illegal, unreported and unregulated fishing
JICA	Japan International Cooperation Agency
MTE	Mid Term Evaluation
NFP	National Focal Point
NPC	National Project Coordinator
NVQ	National Vocational Qualification
OSPESCA	Organización del Sector Pesquero y Acuícola del Istmo Centroamericano (Central American Organization of the Fisheries and Aquaculture Sector)
PCU	Project Coordination Unit
RPC	Regional Project Coordinator
RPSC	Regional Project Steering Committee
SCCF	Special Climate Change Fund
SIDS	Small Island Developing States
TNC	The Nature Conservancy
UN	United Nations
USD	United States Dollar
UWI	University of the West Indies
VCA	Vulnerability and Capacity Assessment
VHF	Very high frequency
WECAFC	Western Central Atlantic Fishery Commission



## INTRODUCTION

1. The FAO/GEF CC4FISH launching workshop was held in Bridgetown, Barbados, from 7 to 9 February 2017. This meeting brought together 27 representatives from the Member Countries, partner organizations and other key stakeholders involved in the delivery of the project in order to ensure that there was a common understanding of the project's objectives, inputs, outputs, outcomes and planned activities, as well as the roles and responsibilities of all project partners.
2. The objective of the CC4FISH project is to increase resilience and reduce vulnerability to climate change impacts in the Eastern Caribbean fisheries sector, through the introduction of adaptation measures in fisheries management and capacity building for fisherfolk and aquaculturists. The project aims to: enable a better understanding and awareness of climate change vulnerability; increase the resilience of fisherfolk, fisherfolk organizations and aquaculturists; and improve governance by mainstreaming climate change adaptation in multilevel fisheries governance.
3. The CC4FISH project is funded by the Global Environmental Facility (GEF) under the Special Climate Change Fund (GEF-SCCF) with a total contribution of USD 5 460 000, in addition to co-financing provided by countries and regional partners totaling USD 34 850 000. The project is being implemented by FAO and is set to last 48 months; this period officially started in January 2017. The development of the project proposal was carried out with the full involvement of the participating countries and the regional partners, in compliance with the Ecosystem Approach to Fisheries (EAF) and so as to ensure a sense of ownership for all parties.
4. The overall objective of the workshop was to refine the annual work plans and budget (AWP/B) of all partners for 2017, by: discussing the detailed activities, timeframe, partners and procurement needs; reviewing and agreeing on financial and managerial matters; and discussing monitoring and reporting requirements. The AWP/B provided the necessary input for the preparation of draft Letters of Agreement between the project partners and FAO for the implementation of activities under CC4FISH.
5. During the workshop, the administrative and operational management arrangements made by FAO, together with the monitoring, evaluation and financial reporting processes were discussed. Another important focus for discussion concerned the project's institutional set-up and its previously agreed implementation arrangements.
6. The principal objectives of this inception workshop were to:
  - clarify the project's required inputs, outputs, objectives and outcomes;
  - develop a clear understanding of the various partners and stakeholders' project-related responsibilities;
  - raise awareness of the project's institutional set-up, previously agreed implementation and financial arrangements;
  - clearly define and agree on a work plan and budget for Year 1 for each partner;
  - review the monitoring and evaluation processes to track project progress;
  - review the financial and activities monitoring requirements;
  - establish a timeline for Year 1 of the project.
7. The expected outputs included agreement on:
  - outcome and output project indicators (baseline and targets);
  - project AWP/B for all partners for Year 1;
  - responsibilities of all project partners;
  - institutional set-up and implementation arrangements;

- mechanism for monitoring and evaluation as well as progress reporting;
- project road map and timeline of next steps to be undertaken by all partners.

### **OPENING OF THE MEETING**

8. The meeting was hosted by the Western Central Atlantic Fishery Commission (WECAFC) at United Nations House, Barbados. Welcoming remarks were delivered by Mr Raymon van Anrooy, **FAO Secretary to WECAFC**, on behalf of FAO/WECAFC.

### **ATTENDANCE**

9. Representatives of the following States attended the meeting: Antigua and Barbuda, Dominica, Saint Lucia, Saint Kitts and Nevis, and Saint Vincent and the Grenadines. Fisheries experts from Grenada, Saint Lucia and Trinidad and Tobago were also present. Representatives of the following organizations were present: Caribbean ICT Research Programme (CIRP), Caribbean Institute for Meteorology and Hydrology (CIMH), Caribbean Natural Resources Institute (CANARI), Caribbean Network of Fisherfolk Organizations (CNFO), Caribbean Regional Fisheries Mechanism (CRFM), Centre for Livelihoods Ecosystems Energy Adaptation and Resilience (Clear Caribbean), Centre for Fisheries Research and Development (CFRD), Centre for Resource Management and Environmental Studies (CERMES), The Nature Conservancy (TNC) and WECAFC/FAO. The list of all participants and observers can be found in Appendix A.

### **ELECTION OF CHAIRPERSONS AND RAPORTEURS**

10. Ms Iris Monnereau was Chairperson for Day 1 of the meeting. She was assisted by Mr Raymon Van Anrooy. Ms Tarub Bahri, Fisheries Resources Officer FAO-FIRF, was chair for Day 2 and Day 3. Ms Celestine Moe was appointed rapporteur for the meeting, and assisted by Ms Tarub Bahri, Mr Raymon van Anrooy, Ms Iris Monnereau and Ms Chiara Pili, Technical Officer, TCID during the proceedings.

### **ADOPTION OF THE AGENDA**

11. The workshop adopted the agenda as shown in Appendix B.

### **PROJECT BACKGROUND**

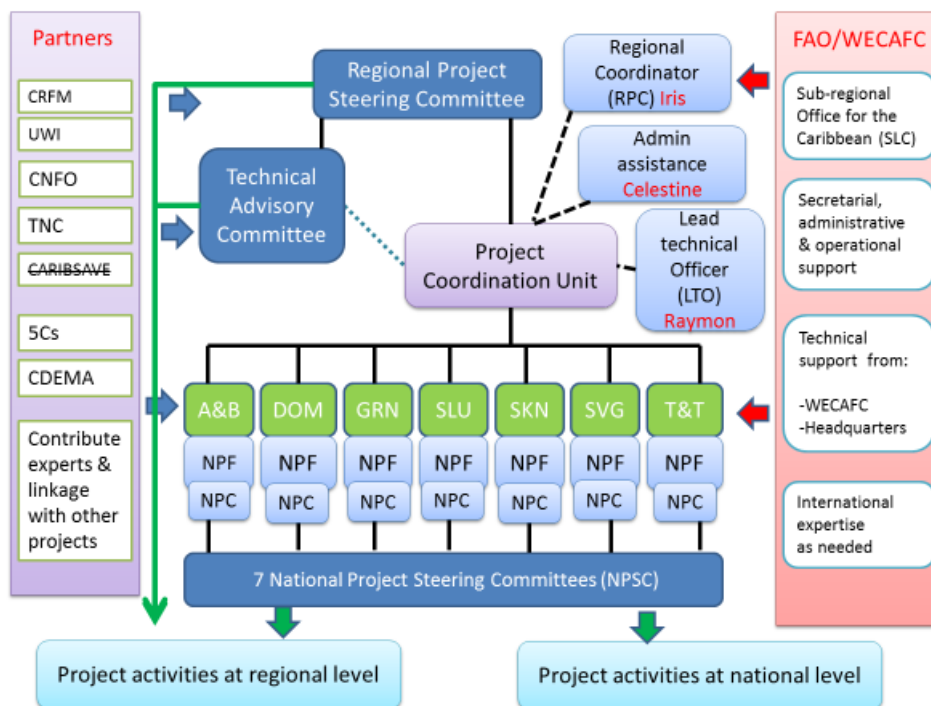
12. Mr Raymon van Anrooy, WECAFC Secretary, welcomed the participants on behalf of FAO. He referred to the project formulation process and the approval of the project in early 2016 by the GEF with funding from the SCCF. He informed participants of the recruitment of Ms Iris Monnereau as Regional Project Coordinator (RPC) and Ms Celestine Moe as Administrative/Operational Support for the CC4FISH project.
13. Mr Raymon van Anrooy reminded participants that the CC4FISH project is in line with the current concerns and priorities of the global climate change agenda. At the United Nations Climate Change Conference (COP21) in Paris in 2015, the Parties agreed to set a goal of limiting global warming to less than 2 degrees Celsius as compared to pre-industrial levels. This is insufficient for most Small Island Developing States (SIDS), where a 1.5 degrees Celsius increase would result in catastrophe. The twenty-second session of the Conference of the Parties (COP 22), held in Marrakesh, was declared to be the COP of action, focusing on solutions and actions to be taken to cope with climate change. In this respect the CC4FISH project is timely and well placed to develop and share success stories on climate change adaptation in the fisheries and aquaculture sector. The CC4FISH project recognizes the problems and challenges when adapting to climate change in small-scale fisheries in the Caribbean region, and provides practical actions that will help the sector to adapt to these changes. In that sense the project is unique in the region.

14. Mr van Anrooy also referred to the Green Climate Fund (GCF) and the potential contributions that the CC4FISH project will make to the achievement of the Sustainable Development Goal targets for 2030 and the SIDS Accelerated Modalities of Action (S.A.M.O.A.) Pathway, by contributing to sustainable fisheries, oceans, the livelihoods of the Caribbean SIDS population, food security and the regional fight against Illegal, Unreported and Unregulated fishing (IUU).
15. Mr van Anrooy provided an overview of the project for those workshop participants who had not participated in the formulation process. The project will be the first intervention to support the “Strategy and Action Plan for Disaster Risk Management (DRM) and climate change adaptation in fisheries and aquaculture in the Caribbean Community and Common Market (CARICOM) region” (developed in 2012), a strategy prepared in collaboration with the Caribbean Community Climate Change Centre, Caribbean Disaster and Emergency Management Agency, the CRFM, CERMES from the University of the West Indies (UWI), WECAFC and FAO, as well as support from all Caribbean states and the major environmental NGOs active in the region. Due to its integration into the regional strategy and action plan, the sustainability of the project’s interventions will be guaranteed. Lessons learned from the project can be applied and successful approaches could be replicated in the wider Caribbean region, and therefore play a key role in engendering further investment in climate change adaptation in the fisheries and aquaculture sector.
16. After outlining the background to, as well as the objectives and expected results of CC4FISH, Mr van Anrooy subsequently informed participants of the expected outcomes of the launching workshop (see paragraph 7).
17. He added that the launching workshop should be regarded as the 1st Regional Project Steering Committee (RPSC) meeting, considering that nearly all National Focal Points (NFP) and all regional partners were in attendance, and that the AWP/B would be presented and provisionally agreed upon by the meeting participants.

#### **ADMINISTRATIVE AND OPERATIONAL SYSTEMS FOR THE CC4FISH PROJECT**

18. The budget and financial matters were presented by Mr Ricardo Luna, International Administrator of the FAO Subregional Office for the Caribbean (FAO-SLC). He explained the role of FAO-SLC as the implementing agency that manages the portfolio for several programmes throughout the Caribbean/Latin America region. The programmes are currently active in over 23 countries, servicing a population of 17 million people and with available funds in excess of USD 45 million.
19. Mr Ricardo Luna highlighted the role of FAO-SLC throughout the project’s life cycle, and the importance for all project partners to provide the necessary reports and deliverables as per the agreed timetable. These deliverables are required for timely disbursements of funds to finance activities against the agreed AWP/B per partner, for the early detection of cost overruns and the revision of budgets, as well as for the internal and external auditing purposes. Detail was provided regarding the responsibilities and accountability of the budget holder (BH), as well as the functions of the various positions depicted on the FAO/SLC organigram presented for the CC4FISH project.
20. Ms Iris Monnereau delivered a presentation providing a detailed overview of the CC4FISH project, the current work plan and results matrix – as developed in the Project Document – and a detailed overview on the expectations of the AWP/Bs for all project partners.
21. She began with an overview of the direct and indirect climate change impacts on the fisheries sector in the Caribbean. Based on the current observations and climate projections for this region, and knowledge garnered mostly from other tropical regions, it has become clear that the fishery sector of Caribbean SIDS is highly vulnerable to climate change and climate variation. Several projections have indicated that the marine capture sector in the region will suffer from changes in fish size, fish redistribution, fish production and eroding reef habitats.

22. She detailed the negative climate change impacts on the fisheries sector that are already obvious in the Caribbean region, which include coral bleaching (damaging critical fish habitats), an increasing intensity of storms together with increased sea level (damaging fish habitats, fishery access and assets) and *sargassum* influxes (disrupting fishing operations and communities and impacting the sustainability of the resource). Noted impacts as a result of climate change are changes to ocean currents and ocean warming, which have recently been linked to an unprecedented influx of pelagic *sargassum* seaweed into the Caribbean Sea since 2011. This has resulted in significant disruption to the fishery sector in Caribbean SIDS. The rise in sea surface temperature by 1–2 degrees Celsius above the normal maximum temperatures throughout northern and eastern Caribbean persisted for long periods in 2005 and 2010, resulting in some instances of mass coral bleaching in, and with associated high levels of coral mortality. An increased intensity of storms and hurricanes in the Caribbean during the 1944–2006 period – with a dramatic increase in frequency since 1995 – has resulted in disruption to the livelihoods of coastal fishing communities, losses or significant damage to boats and fishing gear, loss of fishing days, and an increased risk of accidents on shore and at sea.
23. Ms Iris Monnereau explained that the CC4FISH project aims to increase resilience and reduce vulnerability to these and other climate change impacts in the Eastern Caribbean fisheries sector, through the introduction of adaptation measures in fisheries management and capacity building for fisherfolk and aquaculturists.
24. Ms Monnereau presented the variety of adaptation measures available under the CC4FISH project by going through the logframe displaying the project’s components, outcomes, outputs, and activities. In addition, she presented the targets the CC4FISH project will need to achieve over its four-year duration, and which will require close monitoring and evaluation to ensure successful delivery of the project to the funders. The AWP/B were discussed as they were designed in the Project Document, together with the overlaps and differences between regional- and national-level activities. The presentation concluded with a detailed overview of the activities on the launching workshop’s agenda.
25. Mr van Anrooy presented on the institutional set-up, monitoring and reporting framework and coordination with partners of the CC4FISH project. An overview of the institutional set-up is presented below:



The only change from the Project Approval stage has been the removal of CARIBSAVE as a partner in the project as the organization no longer exists. Mr Raymon van Anrooy subsequently discussed the tasks of the various entities that are involved in the project, such as the Fisheries Divisions and Departments and their appointed National Focal Points (NFPs), the National Project Coordinators (NPCs), the Project Coordination Unit (PCU), the Regional Project Steering Committee (RPSC), Technical Advisory Committee (TAC) and FAO. The main tasks for the PCU at the WECAFC Secretariat include:

- To support the technical implementation of regional project activities and provide support to the national co-executing partners in the implementation of national activities;
  - to oversee the daily management of the project;
  - to monitor day-to-day project progress and achievement of results; and
  - to undertake the financial management and planning of the procurement of goods, minor works and services.
26. Mr van Anrooy ended his presentation by listing a range of proposals that should be considered for collaboration with the CC4FISH project and some general comparative advantages, and the potential roles of regional executing partners in the project. He underlined the importance of collaboration between different projects in the region. In addition, the need to update the project list with the most recent initiatives that are being planned or implemented, as well as those that have already been concluded in the region was highlighted.
27. Mr Jim Franks from the University of Mississippi and Mrs Hazel Oxenford from CERMES presented the most up-to-date knowledge on the recent influxes of *sargassum*, examined critical fisheries (pelagic) aspects associated with the *sargassum* influx, provided an outline of the plan of research (under CC4FISH). This work is in response to the need to understand underlying mechanisms associated with *sargassum* events, and the expected outputs of their research.
28. Mr Jim Franks explained that pelagic *sargassum*, a complex of two co-occurring species of drifting brown algae (*Sargassum natans* and *Sargassum fluitans*), is found exclusively in the Atlantic Ocean and serves as habitat for a large and diverse assemblage of fishes. However, since 2011 unprecedented quantities of pelagic *sargassum* have washed into coastal waters and washed up along the coastlines of Eastern Caribbean states, severely impacting on fisheries and fishing communities. This has resulted in the loss of valuable fishing opportunities and time, damage to gears together with disruptions to catches, particularly that of two of the most important, highly seasonal pelagic species, dolphinfish and flyingfish. The *sargassum* blooms have also proved an ecological disaster by invading mangroves (leading to a scarcity of oxygen and hence large numbers of fish deaths in these nursery habitats), mass mortality of sea turtles (suffocated as a result of being unable to get to the surface to breath), decreased transparency of water impacting on, inter alia, coral reef health, and the effect on human health as the blooms rot along the coastline close to people's houses. In view of the critical importance of sustainable fisheries to regional livelihoods, research will be conducted by Mr Jim Franks and Mrs Hazel Oxenford, in concertation with fisher organizations and fisheries departments of beneficiary countries, to better understand these events and support the capacity to predict similar occurrences in the future.
29. The following activities are related to the *sargassum* research conducted by Mr Jim Franks and Mrs Hazel Oxenford:
- Develop a model to describe the growth and movement of pelagic *sargassum* within the North Equatorial Recirculation Region and Eastern Caribbean, using a numeric hydrological circulation model (global ocean Hybrid Coordinate Ocean Model), which incorporates time-scaled pelagic *sargassum* growth rates;

- Investigate the relationship between *sargassum* events and two key pelagic species, dolphinfish and flyingfish, using official catch and effort data held by the Fisheries Divisions of the Eastern Caribbean islands over the past decade, and targeted interviews with pelagic fishers in the region.

Expected outputs resulting from the research are:

- to contribute to the overall predictive/forecast capabilities pertaining to regional, large-scale pelagic *sargassum* influx events;
  - to inform ongoing assessments of the Eastern Caribbean islands fisheries sectors' sensitivities to climate change;
  - to inform the development of adaptive climate change strategies so as to support fisheries sustainability in the Eastern Caribbean;
  - to inform pre-emptive actions within the pelagic fishery sector.
30. After the presentation it was noted that in order for this modelling assessment to be successful it would be necessary to obtain catch and effort data for the two key fisheries from the project countries (flying fish and dolphin fish) prior to and post 2011, as well as the recording/reporting of *sargassum* landings (information on location and date, which would be useful for the backtracking).
  31. It was also noted that *sargassum* appeared to have different effects on different fish stocks; lobster, for example, appeared to be more abundant. It was then highlighted that fisherfolk's observations are key to creating linkages with, and fine-tuning, the predictions coming out of the modelling assessment. The University of Mississippi has developed a website to report on *sargassum* observations, which could be used to report sightings of *sargassum* by fisherfolk. Some options were explored with respect to the best way for fishers to report on *sargassum*, including: delegating a certain number of people in each country to convey the information to the website; take pictures with disposable cameras; or invest in the development of an app (via mFisheries or separate) that can send pictures directly to the website. The web link could also feature on the CC4FISH website (currently under construction). It was also noted that species recognition could potentially be fed into the mFisheries app by means of an extra app (with possible intelligence in terms of species recognition; this possibility will be investigated further by CIRP).
  32. It was noted that alongside these regional activities on the influx of *sargassum* it would be important to further improve national level plans and policies in the face of recurring *sargassum* influxes. The CRFM pointed out that it has already developed a 'Model Protocol for the Management of Extreme Accumulations of *Sargassum* on the Coasts of CRFM Member States', which could act as a guide when developing national-level management plans. It was suggested that the NPCs can further develop these national-level management plans under the CC4FISH project for each country, in collaboration with the appropriate institutions.
  33. Mr Craig Batstone delivered a presentation on the work of *GeoOrbis*, as countries showed interest in the project preparation phase when using remote sensing and maps for the zoning of fisheries and other coastal resource users. *GeoOrbis*, incorporated in 2004 and headquartered in Barbados, is a consultancy firm consisting of an experienced team of qualified Geographic Information System professionals offering geospatial project management, fleet and asset management solutions, base-mapping and applications development for companies throughout the Caribbean. The presentation focused on the work of *GeoOrbis* using EOMAP (Optical Remote Sensing for the Aquatic Sector), DigitalGlobe (Satellite Imagery Products and Services) and their suite of products, including bathymetry, benthic habitat, benthic seafloor and water quality solutions. These products are derived from satellite information using up to nine dedicated satellites ranging from 0.5 m to 30 m in resolution. Results acquired in this manner compare most favourably to those obtained via Marine LIDAR, both in terms of cost and the quality of data retrieved for analysis. These services

may be used in environmental monitoring, particularly for coastal zones, inland waters, wetlands and other areas where high-precision mapping is required. The presentation triggered questions mainly about the cost of the mapping tools and maps themselves, and it was outlined that different resolutions and areas involved different costs.

34. Mrs Chiara Pili delivered some explanatory information on the project planning and reporting requirements for FAO-executed GEF Projects. Participants were informed of the reporting timescale and the requisite documentation to be submitted in order for the project to be successful. Predefined annual deadlines for reporting were disclosed, as all partners are required to submit a variety of reports and documentation (such as co-financing letters). These reports will be collated by the RPC before further submission to the BH for approval. The mid-term (MTE) and final evaluation of the project will be undertaken in collaboration with FAO, who will arrange for the MTE in consultation with project management so as to review the progress and effectiveness of the project. In addition, an independent final evaluation will be performed to identify the project's impact, the sustainability of its results and the degree to which long-term results can be achieved.

### **COUNTRY PRESENTATIONS**

35. Each project country was invited to prepare a brief presentation on their proposed AWP/B for 2017 to share with the group. The intention was to develop an overview of the proposed activities per country and an allocated budget per activity, thereby identifying any possible diversions from their respective original work plans developed during the CC4FISH project preparation phase. To support participants, the original AWP/Bs and project documentation were circulated prior to the workshop.
36. The 2017 AWP/B for **Antigua and Barbuda** was presented by Mr Philmore James, Deputy Chief Fisheries Officer, Ministry of Agriculture, Lands, Fisheries and Barbuda Affairs. Mr James highlighted the fact that Antigua and Barbuda wishes to have a very practical approach to the activities under CC4FISH in order to address the country's needs. For this reason the country has decided not carry out any activities under Component 1.

Antigua and Barbuda aims to produce the following activities under the various CC4FISH Project components in 2017:

Component 2:

- carry out training for market vendors and fish handlers, and introduce equipment to improve food safety and hygiene;
- develop alternative and improved livelihoods and gears, including the development and deployment of Fish Aggregation Devices (FADs);
- deploy buoys for the demarcation of Marine Protected Areas;
- provide improved safety-at-sea training and distribute equipment (e.g. Very High Frequency Radios (VHF), transponders);
- develop a disaster preparedness plan specific to the fisheries sector (including the development of a safe harbour location plan in the event of emergency);
- develop an emergency safe harbour location plan and install boat hauling equipment;
- provide training and deliver equipment to further promote aquaponics activities;
- develop a marketing strategy for aquaculture products.

Component 3:

- develop and provide training in climate change adaptation for Fisheries Division staff and related fisheries sector agencies;
- develop outreach material and conduct community workshops for community awareness on climate change adaptation in the fisheries sector;

37. Questions were raised on the feasibility of implementing a hurricane shelter and necessary boat hauling equipment within the allocated budget. It was noted that Barbados has experience with boat hauling equipment and that exchanges between countries would be vital to successful implementation. FAO noted that the country would need to ensure the maintenance of the equipment during and after the project lifetime and put measures in place to safeguard against the theft of equipment. It was also noted that provisions should be made for the maintenance of the equipment despite the government's maintenance capacity. Mr James provided assurances that contracts would be signed with an insurance company. Despite the fact that Antigua and Barbuda did not wish to engage in the vulnerability assessment, it was noted that the VAs could support the activities undertaken in component 3. The need for a communication strategy for CC4Fish which would target a variety of stakeholders and audiences was highlighted.
38. The 2017 AWP/B for **Dominica** was presented by Mr Norman Norris, Senior Fisheries Officer, Ministry of Fisheries & Agriculture.



Dominica aims to produce the following activities under the various CC4FISH project components in 2017:

Component 1:

- choose the vulnerability assessment sites for the VAs to be carried out in Year 2;
- develop communication materials to enhance the visibility of the VAs to be carried out, as well as the results.

Component 2:

- organize an exchange with FAD fishers in Guadeloupe to learn more about the deployment and use of SmartFADs as part of the MAGDALESA project;
- carry out training for market vendors and fish handlers, and distribute equipment to improve food safety and hygiene;
- provide Basic Fisherman Training courses to a large set of fishers (training includes safety- at-sea to climate change impacts) and distribute equipment;
- develop a needs assessment report on the use and needs of fisherfolk insurance;
- provide support to rebuild the aquaculture areas damaged by Tropical Storm Erika in 2015.

Component 3:

- develop and provide climate change adaptation training for Fisheries Division staff and related fisheries sector agencies;
- develop a report to examine the need and requirements for the mainstreaming of climate change into fisheries plans, policies and strategies:

39. Dominica noted that it already had a management plan for the FAD fishery in draft form which could be of use to other partners. In addition, the Fisheries Division has been facilitating the Basic Fisherman Training Course every year since 2005, when it began with 18 participants; in 2016 there were 109 participants. A manual was developed – now on its 3rd edition – which offers modules from fish technology, business skills, co-operative and group development and safety-at-sea to the impact of climate change on fisheries.
40. As a result of Tropical Storm Erika in August 2015 the majority of aquaculture centres in Dominica were destroyed. It is anticipated that thanks to the support provided by the CC4FISH project the rebuilding of these centres may be accomplished, which could be crucial to the industry.
41. The 2017 AWP/B for **Grenada** for was presented by Mr Denzel Adams, Coral Nursery Coordinator, United Nations Development Programme.

Grenada aims to produce the following activities under the various CC4FISH project components in 2017:

Component 1:

- choose the vulnerability assessment sites for the VAs to be carried out in Year 2;
- develop communication materials to enhance visibility of the VAs to be carried out, as well as the results.

Component 2:

- carry out training for market vendors and fish handlers, and distribute equipment to improve food safety and hygiene;
- develop alternative and improved livelihoods and gears (including further training of fishers in the use of FADs);
- develop an enhanced safety-at-sea training course;
- provide improved safety-at-sea training and distribute equipment (e.g. VHF, lifejackets);
- develop a business skills training manual;
- provide business skills training to fishers and market vendors;
- develop a boatbuilding training workshop for local boat builders to improve, *inter alia*, safety at sea;
- aquaponics activities further strengthened by means of training of aquaponics farmers.

Component 3:

- develop and provide climate change adaptation training for Fisheries Division staff and related fisheries sector agencies;

42. It was noted that many other initiatives are currently taking place in Grenada (e.g. UNDP Ridge to Reef, UNDP - German Development Agency funded, the Climate Change Adaptation Fund, projects by TNC). It would be very important for CC4FISH to build on to these activities.
43. There are currently no active FADs on the west coast of Grenada (but there are functional FADs on the east coast), and while other projects, such as that led by the Japan International Cooperation Agency (JICA), supported the sector by providing equipment, the CC4FISH project could focus on providing training in the effective usage of FADs. It was noted that there would be a need to put more emphasis on FAD management and its necessary institutional framework. It was highlighted that although FADs are currently being promoted as a means of using underexploited species, they are in fact already in heavy use in the region. Several FAD management plans, including various regional documents and national management plans (e.g. in Dominica), have been developed, and CC4FISH activities should make use of these documents and build on them. A need for more in-depth knowledge on the mooring on FADs and the understanding of the ecological system around the FADs would also be necessary.
44. It was noted that due to the establishment of an increased number of Marine Protected Areas (supported mainly by TNC), fisherfolk have to go further to fish, resulting in the need for increase safety-at-sea training for fishers.
45. The 2017 AWP/B for **Saint Kitts and Nevis** was presented by Ms Nikkita Brown, Oceanography and GIS Officer, Department of Marine Resources, and Ms Tricia Greaux, Marine Management Areas and Habitat Monitoring Officer, Department of Marine Resources

Saint Kitts and Nevis aims to produce the following activities under the various CC4FISH project components in 2017:

Component 1:

- choose the vulnerability assessment sites for the VAs to be carried out in Year 2;
- develop communication materials to enhance visibility of the VAs to be carried out, as well as the results;
- conduct data collection on the pelagic fishery.

Component 2:

- carry out training for market vendors and fish handlers, and distribute equipment to improve food safety and hygiene;
- develop an enhanced Basic Fisherman Training Course manual;
- train trainers to teach the Basic Fisherman Training Course to fisherfolk, as well as fish vendors and handlers;
- provide business skills training to fishers and market vendors.

Component 3:

- develop a report to examine the need and requirements for the mainstreaming of climate change into fisheries plans, policies and strategies;

46. It was recommended that several of the activities that were scheduled to take place in Project Year 2 could actually be carried out in Project Year 1: e.g. the business skills training and development of a *sargassum* protocol. The importance of creating synergies with other projects, including the Caribbean Large Marine Ecosystem (CLME+) project and the seamoss farming project, was highlighted.
47. The 2017 AWP/B for **Saint Lucia** was presented by Mr Thomas Nelson, Deputy Chief Fisheries Officer, Department of Fisheries Ministry of Agriculture, Fisheries, Physical Planning Natural Resources and Co-operatives.

Saint Lucia aims to produce the following activities under the various CC4FISH project components in 2017:

Component 1:

- choose the vulnerability assessment sites for the VAs to be carried out in Year 1;
- develop communication materials to enhance visibility of the VAs to be carried out, as well as the results;

Component 2:

- carry out training for market vendors and fish handlers, and distribute equipment to improve food safety and hygiene;
- develop a management plan for the use of a suitable mechanism to enable fishers to issue distress calls when at sea, and enable marine police to quickly locate boats in distress;
- train fishers in the NVG;

Component 3:

- develop and provide climate change adaptation training for Fisheries Division staff and related fisheries sector agencies;
- develop a report to examine the need and requirements for the mainstreaming of climate change into fisheries plans, policies and strategies;
- develop a National *Sargassum* Management Protocol for Saint Lucia;
- develop outreach material and conduct community workshops for community

48. Saint Lucia put itself forward as one of the candidates for the pilot vulnerability and capacity assessments (VCA). For 2017 the country's main activities include developing their own NVQ training for fishers. Prior to the NVQ training a needs assessment will be carried out because, while the training to date has been completed successfully, there seemed to be very limited follow-up activities for those who participated. It is crucial that this be improved under the CC4FISH project. There are currently two submerged FADs provided by the JICA-CARIFICO project; CC4FISH would monitor and evaluate these two FADs in order to improve the management of the FAD fishery.
49. A National Aquaculture Strategy Plan is needed, as there is currently no management plan for aquaculture. Taiwan has offered support for the production of juveniles of prawns and tilapia, and to a lesser extent aquaponics; however, this has been rather ad hoc to date, which has demanded the creation of a long-term strategy and management plan. The need for an updated fisheries law in Saint Lucia was also discussed. A national fisheries plan was developed with the support of ACP-Fish, but it did not address climate change issues properly; CC4FISH could support this.
50. The 2017 AWP/B for **Saint Vincent and the Grenadines** was presented by Mr Kris Isaacs, Senior Fisheries Officer Fisheries Division, Ministry of Agriculture, Forestry, Fisheries & Rural Transformation.

Saint Vincent and the Grenadines aims to produce the following activities under the various CC4FISH project components in 2017:

Component 1:

- choose the vulnerability assessment sites for the VAs to be carried out in Year 1;
- develop an assessment of the economic costs and benefits of the current FADs, as well as the placement of additional FADs;
- develop communication material to enhance the visibility of the VAs to be carried out, as well as the results.

Component 2:

- carry out training for market vendors and fish handlers, and distribute equipment to improve food safety and hygiene;
- review best practices and designs for the use of biodegradable panels in lobster pots;
- provide improved safety-at-sea training and distribute equipment (e.g. VHF, lifejackets);
- develop a business skills training manual;
- provide business skills training to fishers and market vendors;
- prepare a disaster preparedness plan for the fishing industry;
- provide training of aquaponics farmers.

Component 3:

- develop a report to examine the need and requirements for the mainstreaming of climate change into fisheries plans, policies and strategies;
- develop a National *Sargassum* Management Protocol for Saint Vincent and the Grenadines;
- develop outreach material and conduct community workshops for community awareness on climate change adaptation in the fisheries sector.

51. Mr Kris Isaacs indicated that a country analysis on the loss and damage related to climate change was being carried out. The discussion highlighted the fact that the activities implemented under other projects (e.g. Stewardfish and CLME+) should complement those carried out under CC4FISH, where applicable: for example, in terms of fisherfolk organizations and EAF training. Links between the various projects in terms of EAF and fisheries management in general should be made explicit.
52. The 2017 AWP/B for **Trinidad and Tobago** was presented by Dr Cindy Chandool, Consultant.

Trinidad and Tobago aims to produce the following activities under the various project components in 2017:

Component 1:

- choose the vulnerability assessment sites for the VAs to be carried out in Year 2;
- develop a risk assessment model to establish climate change impacts on key fish species in Trinidad and Tobago;
- develop communication material to enhance the visibility of the VAs to be carried out, as well as the results.

Component 2:

- carry out training for market vendors and fish handlers, and distribute equipment to improve food safety and hygiene; review of best practices and designs for the use of biodegradable panels in lobster pots;
- provide improved safety-at-sea training and distribute equipment (e.g. VHF, lifejackets);
- develop a business skills training manual;
- provide business skills training to fishers and market vendors;
- prepare a disaster preparedness plan for the fishing industry;
- provide training of aquaponics farmers.

Component 3:

- develop a report to examine the need and requirements for the mainstreaming of climate change into fisheries plans, policies and strategies;
- develop a National *Sargassum* Management Protocol for Trinidad and Tobago;
- develop outreach material and conduct community workshops for community awareness on climate change adaptation in the fisheries sector.

53. During the discussion it was noted that as each country developed its communication strategy it would be important to consider an overarching communication strategy to create awareness on the CC4FISH project throughout the region at various levels. This can be based on existing reference documents in the region (e.g. the communication strategies employed by CRFM, CANARI and CLME+). The strategy should include the need for development of different products (e.g. brochures, radio broadcasts and policy briefs) for the target audiences (e.g. fisherfolk, coastal communities or policymakers) based on specific objectives, messaging and appropriate pathways. This will streamline CC4FISH outreach. It was also noted that communication should reach the policymakers regarding the importance of fisheries and aquaculture for the national economy.
54. The importance of linking with other institutions who have already worked on VCAs and associated models/frameworks, both in the Caribbean and other regions, was also noted.
55. Trinidad and Tobago expressed an interest in having a study done on the impacts of key climate change drivers (e.g. sea surface temperature change and changes in ocean currents) on the key fish pelagic species of Trinidad and Tobago. This will result in certain projections for key species catches, and could help guide fisheries plans and policies in the country. Mr Leonard Nurse noted that the United Nations Framework Convention on Climate Change has already developed certain models that might be of use when Trinidad and Tobago develops their model to assess the risk of climate change on pelagic species. These could potentially be adapted to the local circumstances. CNFO highlighted that even though Barbados was not part of the project, it has been developing and implementing CCA activities which can be of interest to CC4FISH.

## PARTNER ORGANIZATION PRESENTATIONS

56. Mr Patrick McConney, Senior Lecturer, UWI Cave Hill gave an overview of CERMES activities for the CC4FISH Project. These activities include support for VCAs carried out by CANARI: developing prediction models for *sargassum* seaweed influxes and their interaction with pelagic fisheries; the facilitation of fisherfolk learning exchanges; and providing organizational capacity for EAF training as well as on climate change and disasters. The means of implementing these activities were described, along with the main tasks for the first year of the project. General next steps to be taken include:
- interacting with countries and partners to determine what would be the most suitable actions to fit the CC4FISH results matrix;
  - confirming country priorities and likely participation in specific activities;
  - integrating these activities with compatible initiatives as much as possible;
  - ensuring indicators, baseline and targets agreed can be fully operationalized;
  - finalizing multilevel implementation work plans for all CERMES activities.
57. Mrs Kim Mallalieu, Senior Lecturer & Principal Investigator, UWI St. Augustine presented the activities that will be carried out by members of the CIRP CIRP utilizes a range of methodologies that span multiple disciplines to ensure unbroken coherence between fundamental and applied research, and practical Information and Communications Technology (ICT) interventions at the individual, organizational and community levels. The development of the skills and competencies of individuals and organizations to use ICT tools to acquire and disseminate information, as well as to engage in dialogue with relevant agents, is of crucial importance to the CIRP's activities. The contribution made to the CC4FISH project by CIRP features as part of Component 2: *Increasing fisherfolk, aquaculturists and coastal community resilience to climate change and variability*. The beneficiary countries of the CIRP contribution to Component 2.1.1 of the CC4FISH project are: Dominica, Grenada, Saint Kitts and Nevis, Saint Vincent and the Grenadines, and Trinidad and Tobago. CIRP activities for Year 1 will include:
- reporting on the assessment framework for ICT for small scale fishers in the five project countries;
  - developing an mFisheries@sea mobile application and webportals for the five project countries;
  - developing mFisheries@sea web portals for the five project countries;
  - design of a CC4FISH webpage on the CNFO website;
  - developing a user and administrator manual for mFisheries@sea;
  - developing an animated video on mFisheries learning resources;
  - developing a report on *in situ* training, observation and coaching of CNFO technology stewards;
  - develop an assessment report on *in situ* training, observation and coaching of technology stewards in one of the project countries;
  - develop a workbook on general ICT learning resources for stewards.
58. Kim Mallalieu then gave a presentation on the 'Fisheries Early Warning & Emergency Response' (EWERS) project funded by the Inter-American Development Bank. This project aims to develop an early warning and emergency response system for Caribbean fishers. The project is a collaboration between the UWI St. Augustine Campus (CIRP) and Cave Hill Campus (CERMES), the CNFO and The University of Cape Town. The project covers five countries including four CC4FISH countries (Dominica, Grenada, Saint Lucia and Saint Vincent and the Grenadines). The project will be responsible for developing, testing and deploying an ICT-based EWERS for fishers,

including the respective system services and for conducting the requisite training in the use and administration of the system. The EWERS should be integrated within existing national DRM and emergency response frameworks at the national and regional level, and is scheduled to focus primarily on communications. It is expected to reduce fishers' vulnerability to the impacts of climate change while at the same time providing for their sharing of local ecological knowledge to inform climate-smart fisheries planning and management decision-making as well as risk management in the fisheries sector. It was noted that as the project overlaps with some of the activities proposed under CC4FISH (developing a EWERS and DRM plan) the NPCs and NFPs could potentially provide part of the information needed.

59. Mrs Vernel Nicholls, Chairperson of the CNFO, presented on the proposed activities of the CNFO under the CC4FISH project. The CNFO is a network of national and primary fisherfolk organizations and fisherfolk leaders, operating in CARICOM. The CNFO was registered in Belize on 28 June 2016, when it held its first General Assembly and elected a seven-member Executive Committee comprising a chairperson and six other executives. Mr Michelle Lay, Coordinator, and Ms Nadine Nemhard, Administrative Secretary, are CNFO employees.
60. In carrying out its mandate, CNFO has partnered with FAO and other organizations relevant to fisherfolk in the region. To support the launching and implementation of the CC4FISH Project in the Eastern Caribbean, the following activities will be implemented:
  - creating awareness and disseminating information to CNFO members about CC4FISH, its activities and likely achievements so as to obtain buy-in and participation;
  - preparing communications products using brochures and participatory videos, and developing a CC4FISH project webpage on the CNFO website;
  - sharing the lessons learnt and success stories from the CC4FISH project so that these may be replicated and upscaled in regional (GCFIm, Fishers Forum, etc.) and international fora;
  - providing input and support for regional workshops (e.g. on sargassum and VCAs) and national workshops held in the seven project countries;
  - providing input into the regional and national documents developed under CC4FISH.
61. Mr Terrence Phillips, Senior Technical Officer at CANARI, delivered a presentation on an upcoming project which would be carried out by CANARI on climate change adaptation in the Anguilla and Montserrat fisheries. The presentation provided an overview of the Darwin Plus (Overseas Territories Environment and Climate Fund) funded project (GBP 260 925) entitled, "Climate change adaptation in the fisheries of Anguilla and Montserrat", which is to be implemented over the period from April 2017 to March 2020. CANARI, in partnership with CERMES, Department of Fisheries and Marine Resources, Anguilla, and the Fisheries and Ocean Resources Unit, Montserrat, would implement the actions under the project, which are aimed at mainstreaming adaptation to climate change and variability into fisheries governance and management, using EAF, in Anguilla and Montserrat.



62. The project would employ innovative and participatory instruments to assist stakeholders to: determine the institutional readiness for CCA in the fisheries sectors of both Overseas Territories; assess vulnerability within the fisheries sectors; create awareness among key stakeholders about the vulnerability gaps and the actions required; mainstream CCA into fisheries governance and management; and promote ecosystem stewardship, incorporating CCA actions, to improve livelihoods. Instruments to be used would include: the Adaptation Rapid Institutional Analysis (ARIA) toolkit to assess the institutional readiness for CCA in the fisheries of Anguilla and Montserrat; participatory, three-dimensional modelling (P3DM) to facilitate spatial VCA to climate change and natural disasters, focusing on the impact on the fisheries sector; a communication strategy and action plan to improve awareness and understanding among policymakers and other key stakeholders about climate change adaptation readiness and vulnerability in fisheries; the FAO EAF toolkit to build stakeholders' capacity to mainstream climate change and variability in fisheries; and the provision of small grants to fisheries resources users to undertake priority CCA actions at the community level.
63. Under the CC4FISH project CANARI would be responsible for designing and implementing the VCAs of the fisheries sector in the Eastern Caribbean. VCAs are based on a range of biophysical and socio-economic indicators, and have become an important means of establishing who and what is vulnerable to the negative impacts of climate. VCAs are considered to be particularly relevant now that climate change impacts are increasingly being observed. National-level fisheries sector vulnerability assessments have been carried out at the national level worldwide, as well as in a more detailed manner within the Caribbean region. However, they are mostly not carried out at the local level and thus lack in-depth knowledge on local-level variability (e.g. characteristics of landing sites, poverty, and the access to resources needed to adapt fishing boats and gear). In addition, even though a number of VCAs have been carried out in the project countries at the local level, these often do not cover the fisheries sector specifically. The methodology used also differs from study to study, and a regional comparison is therefore not achievable. As a result there is currently no regional framework in place to assess the climate change vulnerability of the fisheries sector at the local level that can easily be applied in fishing communities across the region. However, an understanding of local-level situations is crucial to designing appropriate, location-specific climate change adaptation strategies and informing the mainstreaming of climate change in plans, policies and associated processes under the CC4FISH project and beyond. The VCA regional conceptual framework for the Eastern Caribbean fisheries sector developed by CANARI under the CC4FISH project will address this gap in knowledge.
64. In Year 1 CANARI will:
- develop a technical review report on the application of VCAs in coastal and fishing communities in the Eastern Caribbean;
  - develop a Regional VCA conceptual framework for the Eastern Caribbean fisheries sector;
  - develop a VCA toolkit document for conducting VCAs at the local level for the Eastern Caribbean fisheries sector;
  - conduct VCA of the fisheries sector fieldwork in four pilot coastal communities (across two project countries) to assess the framework and methodology;
  - organize a regional workshop to finalise the Regional VCA Framework and fieldwork guide for the Eastern Caribbean fisheries sector;
  - conduct fieldwork on VCAs in two project countries.

65. Mr van Anrooy, WECAFC Secretary, gave an overview presentation on the roles of WECAFC in the CC4FISH project, which include:
- hosting the CC4FISH PCU
  - act as the regional executing partner for:
    - improving access to insurance and improve risk management of the fisheries sector;
    - sharing information, findings and recommendations with the Wider Caribbean Working Groups;
    - Regional Fisheries Management Plans
    - linkages with other WECAFC/FAO projects, and other regional fishery bodies;
    - the adoption of conclusions and recommendations at the regional level.
66. WECAFC is the agency coordinating the activity in CC4FISH to improve access of fisherfolk to fisheries insurance and social security, and improve the availability of these services in at least four of the project countries. This activity is being carried out in collaboration with the Caribbean Catastrophe Risk Insurance Facility (CCRIF), CRFM, World Bank, the United States of America Department of State and TNC. The activities foreseen are:
- the development of attractive insurance policies and conditions for fishers, to allow them to access credit services to make investments in climate change adaptive technologies;
  - the development of material designed to raise awareness of fisheries insurance, as well as to increase the participation of fisherfolk in health insurance, life insurance, social security schemes and pension schemes.
67. During the presentation, reference was made to the linkages with other regional and national projects hosted by the WECAFC Secretariat at FAO in Barbados – such as the Sustainable Management of Bycatch in Latin America, the Caribbean Trawl Fisheries Project and the Caribbean Billfish Project, and the opportunity to establish firm collaborations between these projects and learn from each other. Specific reference was also made to the Interim Coordination Mechanism for Sustainable Fisheries, under which CRFM, OSPESCA (Organización del Sector Pesquero y Acuícola del Istmo Centroamericano) and WECAFC collaborate to generate scientific advice for fisheries management, develop harmonized regional fisheries management and conservation measures, and adopt these at subregional and regional levels for implementation throughout the Wider Caribbean. It was noted that WECAFC launched a process towards the establishment of a Regional Fisheries Management Organization in the region at its 16th Session in 2016, and that certain findings and recommendations from the CC4FISH project could be of great importance to fisheries management and conservation in the region.
68. Ms June Masters, Statistical and Information Analyst from the CRFM, gave an overview of the activities in relation to Climate Change that the CRFM is currently undertaking, as well as the specific activities that will be implemented under the CC4FISH project.
69. The CRFM projects relating to climate change include the following:
- Pilot Program for Climate Resilience (PPCR) (Jamaica, Haiti, Saint Lucia, Grenada, Dominica, Saint Vincent and the Grenadines) – Component 4 (Marine component);
  - EWERS - Early Warning and Emergency Response System in fisheries (together with Mona Campus , CIRP and CERMES);
  - COAST Project which is focused on insurance in fisheries.

70. The CRFM activities will take place under output 2.1.2: Developing business proposals for underutilized species and adding value:
- identify species with potential for increased socio-economic benefits;
  - evaluate potential measures and methods – including the processing methods best suited to the identified species – for the utilization of fish waste;
  - evaluate potential measures and markets to add value;
  - identify measures to improve quality and food safety processes in the fish chain for improved value-adding;
  - carry out a feasibility study to adopt new processing and marketing opportunities in order to add value and increase economic resilience in response to climate change in two project countries;
  - develop business proposals to facilitate the optimum utilization of the key species identified, and implement the proposals in at least two project countries on a phased basis, as appropriate.
71. The CRFM activities will take place under output 3.1.2: Integrating Climate Change into Caribbean Community Fisheries Policy (CCCFP): develop a protocol and convene a meeting to validate it. The CRFM crafted the CCCFP to promote recognition of the Caribbean Sea as a Special Area of sustainable development, so that fishing effort should not exceed the level of sustainable use. Preventing, deterring and eliminating IUU fishing in order to preserve the livelihoods and welfare of fisherfolk are key elements of the policy, which strengthens, upgrades, harmonizes and modernizes fisheries legislation in the region, and fosters better cooperation and information-sharing at all levels. The CCCFP is a binding treaty focusing on cooperation and collaboration between Caribbean people, fishermen and their governments in conserving, managing and using fisheries and their related ecosystems sustainably. Although the CCCFP touches on many subjects that are directly related to climate change, climate change is not mainstreamed into the document directly. This activity will address this gap by means of:
- A. the development of a protocol to integrate CCA and DRM in fisheries and aquaculture into the CCCFP;
  - B. convening a meeting comprising of key experts to review and provide further inputs to the draft protocol, prior to its submission for approval and endorsement by the Forum and Ministerial Council respectively.
72. Mrs Patricia Shako, Director of the Eastern Caribbean at TNC, outlined the activities of the TNC. She provided an overview of: a) the context of the work of TNC and its organizational changes; b) TNC's areas of work; c) ongoing projects and projects in the pipeline; and d) the potential areas of collaboration between CC4FISH and TNC. In the global programme the research and project activities under the Oceans and Climate banner are most relevant to CC4FISH. The ongoing work of TNC in the fields of Disaster Risk Reduction (Coastal Resilience Mapping), green infrastructure for the At the Water's Edge project in Grenada, and coral reef nurseries were all particularly highlighted. Other upcoming projects of interest were the "International Climate Initiative: Integrating Ecosystem and community-based approaches to enhance climate change adaptation in the Caribbean" (EUR 5.8 million), which is to be launched soon in Jamaica, Dominican Republic, and Grenada. There is also the Caribbean Regional Oceanscape Project which is financed by WB and GEF on marine spatial planning.
73. On the last day Mrs Margarita Diubanova, Strategy and Science Advisor at FAO, gave an online presentation providing insights into the objectives and focus areas of the GCF. The aim of the presentation was to inform country participants of the possibilities of the GCF fund for climate change mitigation and adaptation activities in their countries. The GCF operations were explained, and the presentation highlighted that FAO became an accredited entity with GCF in 2016, allowing

Members to access support for the development of their funding proposals; moreover, FAO can partner with one of the 41 other accredited GCF entities in the design and implementation of GCF projects. To date, the main project countries in the region have been in Latin-America; no projects in the Caribbean have as yet been approved. It was highlighted that the activities should be country-driven and integrated into development plans/strategies and linked to climate change strategies and plans (e.g. Intended Nationally Determined Contributions, Nationally Appropriate Mitigation Actions, National Adaptation Programmes of Action, National Adaptation Plans). Allocation was, inter alia, based on the urgent and immediate needs of vulnerable countries, in particular Least Developed Countries and SIDS. The CC4FISH project is aligned with the objectives of GCF to promote a paradigm shift towards climate-resilient development and improve the sustainability of resource use.

## **NEXT STEPS AND CLOSURE OF THE WORKSHOP**

74. The NFPs agreed to forward their drafted work plans by 24 February 2017, commence the organization of their respective inception workshops and forward their proposals to FAO by 3 March 2017. The chairperson thanked all attendees for their participation and officially closed the workshop at 12.30 hours. The attendees later participated in a field trip to Six Mens Fishing village in St. Peter, located in the north-west of the island, where they visited the proposed site for a slipway intended to serve boat owners on that side of the island when inclement weather is approaching, or to assist boat owners when their boats require repairs. At the site, several fish vendors were scaling and selling their produce, and participants took the opportunity to observe and ask the vendors questions concerning their trade. The trip later proceeded through Martins Bay, St. John, another fishing village that was recently renovated and caters to locals and visitors, giving them the total fishing village life experience. The field trip concluded at Conset Bay, St. John.
75. The highlights of the official tour at Conset Bay were the fish market, the boats and the jetty. A meeting was later convened with the fisherfolk from Conset Bay, who voiced their concerns passionately; a number of these are noted below:
  - the jetty needs urgent repairs, as it dangerous for the fisherfolk;
  - the passage requires lighting;
  - dredging of the shore has created a shallow area below the jetty where boats dock; as a consequence only two boats can now dock at the jetty, thereby limiting the number of boats able to dock at a given time;
  - The fisherfolk offered their labour to repair the jetty, which was warmly accepted by the BARNUFO president, Ms Vernel Nicholls, who advised them that she would forward their concerns and offer to the relevant authorities.

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**APPENDIX B: AGENDA**

**Agenda  
CC4FISH Project Launching Workshop**

**Barbados, United Nations House, 7–9 February 2017**

<b>Day 1: Tuesday 7 February 2017</b>	
	<b>Opening Session</b>
08.30 – 09.00	Welcome addresses and opening of the workshop
09.00 – 09.30	Overview of workshop objectives and expected outputs - adoption of agenda
09.30 – 10.00	FAO administrative and operational management arrangements for the CC4FISH Project
10.00 – 11.00	The CC4FISH Project <ul style="list-style-type: none"> <li>– Overview of climate change impacts on the fisheries sector in the Caribbean</li> <li>– Project overview</li> <li>– Results Matrix</li> <li>– Annual Workplan template</li> </ul>
11.00 – 11.30	<i>Coffee break</i>
11.30 – 12.30	<ul style="list-style-type: none"> <li>– Project institutional set-up: implementation and management arrangements</li> <li>– Monitoring and reporting</li> <li>– Coordination with partners and related initiatives [other projects in the region/ partnership with the fisheries sector]</li> </ul>
<b>12.30 – 13.30</b>	<b><i>Lunch</i></b>
13.30 – 15.30	<ul style="list-style-type: none"> <li>– Annual Workplans worked out (review of the activities per country and the related budget and timeline for year 1 (with support from FAO staff) for the presentations for the next day) (Countries and regional organizations work with support from FAO staff)</li> </ul>
15.30 – 16.00	<i>Tea break</i>
16.00 – 16.30	<i>Presentation GEOORBIS map software</i> 20 min presentation 10 min Q and A
16.30 – 17.30	<i>Special Sargassum research update</i> Presentation by Prof. Hazel Oxenford and Prof. Jim Franks (30 min followed by Q and A)
17.30 – 19.00	<i>Dinner</i>
<b>Day 2: Wednesday 8 February 2017</b>	
08.30 – 08.45	<b>Summary and conclusions of Day 1 – Agenda for Day 2</b>
08.45 – 09.05	<b>CC4FISH -Workplan 2017 Presentation Antigua and Barbuda (15 min presentation, 5 min question)</b>
09.05 – 09.25	<b>CC4FISH - Workplan 2017 Presentation Dominica (15 min presentation, 5 min question)</b>
09.25 – 09.45	<b>CC4FISH - Workplan 2017 Presentation Grenada (15 min presentation, 5 min question)</b>
09.45 – 10.05	<b>CC4FISH - Workplan 2017 Presentation St Lucia (15 min presentation, 5 min question)</b>
10.05 – 10.30	<i>Coffee</i>
10.30 – 10.50	<b>CC4FISH - Workplan 2017 St. Kitts and Nevis (15 min presentation, 5 min question)</b>

10.50 – 11.10	<b>CC4FISH - Workplan 2017 St. Vincent and the Grenadines (15 min presentation, 5 min question)</b>
11.10 – 11.30	<b>CC4FISH - Workplan 2017 Trinidad and Tobago (15 min presentation, 5 min question)</b>
	<b>CC4FISH - Regional partners presentation</b>
11.30 – 11.50	<b>CERMES (15 min and 5 min questions)</b>
11.50 – 12.10	<b>University of Mississippi/CERMES (15 min and 5 min questions)</b>
12.10–13.00	<i>Lunch</i>
13.10-13.30	<b>CIRP (20 min) (including presentation on EWERS)</b>
13.30-14.00	<b>Discussion on EWERS and possible collaboration with CC4FISH</b>
14.00–14.20	<b>CRFM (15 min and 5 min questions)</b>
14.20-14.40	<b>WECAFC (15 min and 5 min questions)</b>
14.40-15.00	<b>CNFO (15 min and 5 min questions)</b>
15.00-15.20	<b>CANARI (15 min and 5 min questions)</b>
15.20 – 15.50	<i>Tea</i>
15.50-16.10	<b>TNC (15 min and 5 min questions)</b>
16.10 - 17.30	<b>Annual Workplans further worked out (Countries and regional organizations work with support from FAO staff)</b>
17.30 – 18.00	Plenary discussion and remaining questions
<b>Day 3: Thursday 9 February 2017</b>	
08.30 – 08.45	<b>Report back/Summary and conclusions of Day 2 – Agenda for Day 3</b>
08.45 – 09.45	<i>Green Climate Fund presentation -Presentation -Discussion</i>
09.45 – 10.45	<b>M&amp;E and financial monitoring</b>
10.45– 11.15	<i>Coffee break</i>
11.15 – 11.45	<b>Next steps</b>
11.45 – 12.15	<b>Wrap up and conclusions and close</b>
12.15 – 13.00	<i>Lunch</i>
13.00 – 18.00	<b>Fieldtrip -Six men's -Conset bay</b>

The launching workshop of the FAO/GEF funded Climate Change Adaptation in the Eastern Caribbean Fisheries Sector Project was held in Bridgetown, Barbados, 7–9 February 2017. This was the first meeting of the CC4FISH Project and brought together 27 representatives from the member countries, partner organizations and other key stakeholders involved in the delivery of the project to ensure there was a common understanding of the project objectives, inputs, outputs, outcomes and planned activities as well as the roles and responsibilities of all project partners. FAO's administrative and operational management arrangements as well as the monitoring and evaluation and financial reporting processes were also discussed and agreed upon. Project partners developed and presented their annual workplans and budgets to start the implementation of field activities to ensure increased resilience and reduction of vulnerability to climate change impacts in the Eastern Caribbean fisheries sector.

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