



## Darwin Plus: Overseas Territories Environment and Climate Fund

### Final Report

*To be completed with reference to the “Writing a Darwin Report” guidance: (<http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms>). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)*

#### Darwin Project Information

Project reference	DPLUS066
Project title	Climate change adaptation in the fisheries of Anguilla and Montserrat
Territory(ies)	Anguilla and Montserrat
Lead organisation	Caribbean Natural Resources Institute (CANARI)
Partner institution (s)	Fisheries and Ocean Governance Unit, Ministry of Agriculture, Trade, Lands, Housing and the Environment (MATLHE) – Montserrat  Department of Fisheries and Marine Resources (DFMR), Ministry of Infrastructure, Communication, Utilities and Housing, Agriculture and Fisheries – Anguilla  The University of the West Indies - Centre for Resource Management and Environmental Studies (UWI-CERMES)
Darwin Plus Grant value	£260,925
Start/end date of project	1 April 2017/31 March 2020
Project leader name	Ainka Granderson
Project website/Twitter/blog etc.	<a href="http://www.canari.org/climate-change-adaptation-in-the-fisheries-of-anguilla-and-montserrat">http://www.canari.org/climate-change-adaptation-in-the-fisheries-of-anguilla-and-montserrat</a> <a href="https://arcg.is/LWOfy">https://arcg.is/LWOfy</a>
Report author(s) and date	Ainka Granderson, 29 May 2020

### 1 Project Summary

The United Kingdom Overseas Territories (UKOTs), Anguilla and Montserrat, are located in the Eastern Caribbean and are part of the Leeward island chain in the West Indies (see maps in Annex 7). Both UKOTs are highly vulnerable to the impacts of climate change and climate variability, including from increased sea surface temperatures, more intense hurricanes and storms and sea level rise. Most recently, Anguilla was devastated by the Category 5 Hurricane Irma in 2017.

The biophysical and socio-economic impacts of climate change are expected to be significant for the fisheries sectors in both UKOTs affecting fisheries and marine resources, including coral reefs and mangroves, fishing infrastructure and livelihoods. Their fisheries sectors make important contributions to food security, livelihoods and the national economy. In Anguilla, fish production was 438 metric tonnes, valued at US\$ 6 million, with 92 licensed fishers operating 63 fishing vessels in 2014. In Montserrat, fish production was 75 metric tonnes, valued at US\$ 0.7 million, with approximately 100 fishers operating 27 fishing vessels.

Climate change adaptation and building resilience in the fisheries sector is therefore crucial in Anguilla and Montserrat. Needs assessments, commissioned by the Department for International Development in 2012, indicated however that adaptation and resilience actions in both UKOTs have been hampered by weak planning and adaptive capacity.

The Caribbean Natural Resources Institute (CANARI), in partnership with the Department of Fisheries and Marine Resources (DFMR) in Anguilla, Fisheries and Ocean Governance Unit in Montserrat and the University of the West Indies - Centre for Resource Management and Environmental Studies (CERMES), implemented the project, "Climate change adaptation in the fisheries of Anguilla and Montserrat" from April 2017 to March 2020. The project aimed to mainstream climate change adaptation into fisheries governance and management in Anguilla and Montserrat, using an ecosystem approach to fisheries (EAF). EAF recognises fisheries as socio-ecological systems and involves an integrated approach to fisheries management to ensure ecological integrity, human well-being and good governance. This integrated approach not only contributes to enhanced planning and actions on climate change, but more broadly to enhanced sustainability and stewardship of fisheries and marine resources and livelihood benefits.

## **2 Project Stakeholders/Partners**

The key stakeholders, including project partners, were:

**Anguilla:** DFMR, Department of Environment, Department of Disaster Management, Anguilla National Trust, Anguilla Fisherfolk Association, Anguilla Fishing Cooperative and fisherfolk

**Montserrat:** Fisheries and Ocean Governance Unit – Department of Agriculture and Department of the Environment in the Ministry of Agriculture, Trade, Lands, Housing and the Environment (MATLHE), Disaster Management Coordination Agency, Montserrat Fishing and Boaters Association, Montserrat Fishermen's Cooperative and fisherfolk

Using participatory approaches, the project has engaged these key stakeholders in project design, implementation and monitoring in both Anguilla and Montserrat. This has been enabled through the Project Steering Committee, created in August 2017, which comprised fisheries experts from the project partners (DFMR, Fisheries and Ocean Governance Unit - MATLHE, and CERMES), one fisherfolk leader each from the Anguilla Fisherfolk Association and the Montserrat Fishing and Boaters Association, and the project leader from CANARI. The Project Steering Committee met on a semi-annual basis, including one in-person meeting at an inception workshop and five virtual meetings over the project period, providing oversight, monitoring progress against the logframe and identifying synergies with other relevant projects in the UKOTs and regionally. The Project Steering Committee functioned effectively in its role and provided a valuable platform to engage and mobilise all the key project partners and gain inputs into project deliverables and half year and annual reports (see inception workshop report and meeting minutes in Annex 6-1).

Effective engagement of key stakeholders in project implementation was also enabled by the participatory approaches used for knowledge mobilisation and capacity building to promote integration of climate change adaptation into fisheries management and ecosystem stewardship in Anguilla and Montserrat. These involved the use of: participatory three-dimensional modelling (P3DM) to assess climate vulnerabilities and adaptation options for the fisheries sector using a "ridge to reef" approach; participatory video where fisherfolk documented their perspectives on climate change impacts, vulnerabilities and adaptation priorities for awareness raising and advocacy; and capacity building on EAF and ecosystem stewardship using participatory and interactive training tools and small grants for demonstration projects (see outputs 1-4 under section 3.1 for further details).

## **3 Project Achievements**

### **3.1 Outputs**

**Output 1: Local and scientific knowledge combined to assess vulnerabilities and potential adaptation actions for the fisheries sectors of Anguilla and Montserrat, including priorities for institutional strengthening**

## **Vulnerability assessments**

Vulnerability assessments were conducted for Anguilla and Montserrat including comprehensive desk reviews and P3DM from November 2017 to March 2018. P3DM was used as a participatory mapping tool to capture local knowledge and experiences related to climate change impacts and vulnerabilities and identify potential adaptation actions for the fisheries sector. It involved building physical 3-D models of the entire islands of Anguilla and Montserrat that were to scale and georeferenced, focusing on areas critical to the fisheries sector (e.g. fishing communities, landing sites, fishing grounds and supporting ecosystems such as coral reefs and mangroves). A wide range of stakeholders were actively engaged in the P3DM exercises in both UKOTs to assess key vulnerabilities and priorities for action in the areas where they live and work. Stakeholders engaged included key resource users like fisherfolk, community residents, civil society organisations (CSOs), government agencies and the private sector including dive and tour operators. P3DM further enabled EAF, taking into account the ecological, cultural, political and socio-economic context and drivers of vulnerability from “ridge to reef” within the fisheries sector in Anguilla and Montserrat.

As the 3-D models were georeferenced, they were digitised to produce geographic information systems (GIS) datasets and maps for Anguilla and Montserrat (see Annex 6-2). These GIS datasets and maps were shared with the fisheries and physical planning authorities in both UKOTs for integration into national GIS databases currently being established and enable public access to the information, including for fisherfolk and other relevant stakeholders. The local knowledge documented using P3DM could therefore be integrated with scientific and other technical data to support adaptation planning as well as land use and marine spatial planning more broadly.

The P3DM exercise in Anguilla, from February 28 to March 6, 2018, and other climate and technical data highlighted a range of climate change hazards that have affected the fisheries sector, or will pose a significant risk into the future, including:

- Coastal erosion and flooding due to sea level rise which poses a critical challenge to this low-lying island, and especially affects beaches and coastal cliffs and results in groundwater salinization.
- More extreme weather, including hurricanes, tropical storms and storm surge. Stakeholders noted that the Category 5 Hurricane Irma in 2017 was much stronger than other previous major hurricanes, including Category 4 Hurricane Luis in 1995 and Category 4 Hurricane Donna in 1960, with maximum sustained winds of 180 mph and storm surge reaching 200 feet (61 m) inland.
- Sargassum influx that blocks beaches and coves, affects boat engines and limits access to nesting sites by sea turtles.
- Coral bleaching with warmer sea temperatures that affects reef-based fisheries and dive tourism.
- Ocean acidification that will result in reduced health of coral reefs and shellfish and affect reef-based fisheries and dive tourism.
- Erratic rainfall and more dry periods that affects access to rainwater, which is the main source of safe, drinking water on the island.
- Inland flooding that affects in particular the capital, The Valley, damaging property, infrastructure and agricultural lands and increasing sedimentation in the coastal zone.

These climate change hazards have begun to trigger a range of biophysical and socio-economic impacts on fisheries in Anguilla, which are compounded by existing pressures due to coastal development including: sand mining and beach nourishment that alters coastal dynamics; pollution and sedimentation from land-based sources; spread of diseases and invasive species such as the lionfish and non-native sea grasses; overfishing in nearshore reef fisheries and declines in species such as parrotfish and sturgeon fish.

Priorities identified for adaptation in Anguilla’s fisheries include: organisational strengthening of key government agencies, in particular the DFMR; building the adaptive capacity of fisherfolk through enhancing knowledge, skills and resources related to safety at sea, insurance, sustainable fishing practices and technologies and alternative livelihoods like aquaculture and sea moss cultivation; strengthening the system of marine protected areas (MPAs); sustainable financing; improving knowledge management and sharing to inform adaptation planning and decision-making; and strengthening policies, legislation and plans to “climate proof” coastal infrastructure and enable integrated coastal zone management (ICZM) and EAF.

The P3DM exercise in Montserrat, from February 18 to 24, 2018, and other climate and technical data highlighted the following climate change hazards and impacts on the fisheries sector:

- More extreme weather, including hurricanes, tropical storms and storm surge. Stakeholders noted they also felt the effects of Category 5 Hurricane Maria in September 2017, and highlighted the devastation caused by past events such as Hurricane Hugo in 1989 which resulted in loss of fishing infrastructure, erosion of shorelines and damage to coral reefs.
- Flooding and coastal erosion related to extreme weather and to sea level rise, especially in low-lying coastal areas such as the proposed new capital, Little Bay, and the Carr's Bay area (i.e. where the already limited fishing activity on the island is concentrated).
- Intense rainfall events which have contributed to secondary hazards, such as flash floods with stormwater rushing down through ghaunts (ravines running down hillsides) and mudflows as volcanic debris is picked up and washed down from slopes (e.g. Belham Valley area).
- Coral bleaching is thought to be limited currently, but expected to increase if sea temperatures continue to rise. This is a concern for coral reefs already degraded by other anthropogenic stressors, such as land-based sources of pollution, and volcanic activity.
- Influx of sargassum, which was noted to be of concern for all coasts, hindering fishing activity and also impacting turtle nesting sites and recreational beaches (e.g. Carr's Bay beach).

Notably, climate change was treated as secondary to volcanic activity, which was perceived to be the most serious current threat to the island of Montserrat and its fisheries sector. Other key hazards include: inland flooding; landslides and rockfalls; existing anthropogenic pressures from coastal development and quarrying/sand mining; environmental degradation related to pollution and sedimentation from land-based sources; spread of invasive species such as the lionfish; and intensified fishing practices in nearshore areas.

Priorities identified for adaptation in Montserrat's fisheries focused on a multi-hazard approach that promotes economic diversification and improved coastal and marine resources management including: promoting participatory fisheries data collection and monitoring to build a knowledge base for adaptation planning and decision-making; enhancing awareness and capacity among fishers about potential adaptation options and strategies; promoting ICZM and EAF to offset habitat changes and build resilience.

The reports of the climate change vulnerability assessments in the fisheries sectors of Anguilla and Montserrat using P3DM was shared with project partners and other key stakeholders for review and feedback. These reports were finalised based on stakeholder input and disseminated within Anguilla, Montserrat and the wider Caribbean region. A copy of the final summary report – *Assessment of vulnerability to climate change in the Anguilla and Montserrat fisheries sectors* – can be found in Annex 6-2. The physical 3-D models were handed over to fisheries authorities in both UKOTs, DFMR and the Fisheries and Ocean Governance Unit – MATLHE, and used for public display in the national library and airport in Anguilla and in the Montserrat Cultural Centre in Montserrat.

### **Assessments of institutional readiness for climate change adaptation**

The assessments of institutional readiness for climate change adaptation in the fisheries sectors in both Anguilla and Montserrat were conducted between November 2017 to March 2018, using the World Resources Institute's Adaptation: Rapid Institutional Analysis toolkit. The assessment focused on the ability to deliver five key functions: 1) assessment of climate change impacts, vulnerabilities and relevant adaptation actions; 2) prioritisation to identify adaptation actions and channel finances to appropriate institutions or initiatives; 3) coordination via national and sectoral multi-stakeholder mechanisms; 4) information management to ensure the availability of climate and adaptation-relevant information for stakeholders ; and 5) mainstreaming climate change risk and adaptation into sectoral planning. The assessments involved desk research and targeted interviews and focus groups with key institutional stakeholders involved in climate change adaptation and fisheries and coastal and marine management from February 20-21, 2018 in Anguilla and February 5-6, 2018 in Montserrat.

The institutional readiness assessment for Anguilla found that:

- While multi-sectoral assessments have been undertaken that highlight vulnerabilities related to fisheries, a comprehensive vulnerability assessment for the fisheries sector is needed to inform adaptation planning and decision-making.

- A process for prioritising adaptation actions and channelling funds to fisheries sector exists, which includes stakeholder consultation. However, the transparency and level of engagement of the most vulnerable groups to climate change needs to be improved.
- Although different government agencies, CSOs and private enterprises play a role in taking climate change adaptation actions, there is inadequate multi-stakeholder coordination and no national committee on climate change exists in Anguilla. Additionally, a Fisheries Advisory Committee has not been established as set out in the Fisheries Protection Act (2010), which could assist in coordinating climate change actions at the sectoral level.
- Data and information are collected by the DFMR and stored in a database, including a fisher and vessel registry. Early warnings for influxes of Sargassum seaweed on Anguilla's shores are also issued by the Department of Environment. Sharing of data and information is facilitated through different platforms, including government websites and social media. However, information on the condition of fish stocks, harvest levels and critical fisheries infrastructures is not collected on a regular basis, limiting the potential for evidence-based and ecosystem-based approach to adaptation.
- While there are no formal procedures for mainstreaming adaptation actions into fisheries projects, the Anguilla Fisheries Development Plan (2015) does include key steps to address climate change, such as reducing fishing on coral reefs and developing guidelines for coastal developments to reduce negative impacts on Anguilla's coastal and marine habitats that support the key economic sectors, tourism and fisheries.

Recommended actions to improve the institutional environment for climate change adaptation in Anguilla's fisheries sector included: updating and approving the draft Climate Change Policy to provide overarching guidance for adaptation; establishing a national multi-stakeholder coordination committee to address climate change; establishing a national information database to improve sharing of relevant data and an inventory of past and ongoing adaptation actions to identify lessons and best practices for the fisheries sector; and integrating climate change adaptation and disaster management considerations into fisheries management plans.

The institutional readiness assessment for Montserrat found that:

- While multi-sectoral assessments have been undertaken that highlight vulnerabilities related to fisheries, a comprehensive vulnerability assessment for the fisheries sector is needed to inform adaptation planning and decision-making.
- Adaptation actions related to the fisheries sector have been identified and prioritised as part of the development of Montserrat's Sustainable Development Plan (2008-2020) and draft Climate Change Policy (2015), but adequate implementation of these actions has been limited by insufficient budgetary allocations.
- In terms of coordination, there is a functioning Ocean Governance Committee, which is a national multi-stakeholder committee that can coordinate and advise climate change adaptation and other interventions in the fisheries sector. However, this committee does not currently have an approved mandate and there is no overarching ocean governance policy or plan to guide its work.
- Data and information to facilitate adaptation planning for the fisheries sector is also limited. Catch and effort data are collected by the Fisheries and Ocean Governance Unit, but data on fish stocks and socio-economic conditions are not collected on a continuous basis. Information sharing is constrained by the absence of a publicly accessible online platform for stakeholders to access and exchange climate and other relevant information.
- Although acknowledged as a need, effective integration of climate change adaptation and disaster risk management in the fisheries sector is limited by the absence of a fisheries or ocean governance policy or plan into which climate adaptation actions can be mainstreamed. Adaptation efforts for the sector are therefore primarily ad hoc.

Recommended actions for strengthening the institutional environment included: finalising and implementing Montserrat's Draft Climate Change Policy and Action Plan; updating Montserrat's Draft Fisheries Plan to integrate climate change adaptation and disaster risk management and formalising the plan; formalising the Oceans Governance Committee and developing an Ocean Governance Plan, which includes climate change adaptation for the fisheries sector using EAF; and establishing a national information database to improve sharing of relevant data and an inventory of past and ongoing adaptation actions to identify lessons and best practices for the fisheries sector.

The reports of the assessments of institutional readiness for adaptation in the fisheries sectors of Anguilla and Montserrat were shared with project partners and other key stakeholders for review and feedback. These reports were finalised based on stakeholder input and disseminated within Anguilla, Montserrat and the wider Caribbean region. A copy of the final summary report – *Institutional assessment of climate change adaptation readiness in the Anguilla and Montserrat fisheries sectors* - can be found in Annex 6-3.

**Output 2: Knowledge mobilisation and exchange strengthened to catalyse change in policy and practice for enhanced climate change adaptation and stewardship among key policy makers, resource managers and resource users in Anguilla and Montserrat based on assessed vulnerabilities and institutional readiness to adapt in the fisheries sector**

**Awareness and advocacy products and other events on mainstreaming adaptation**

CANARI developed a number of awareness and advocacy products based on the project communication strategy (see Annex 6-4), including two posters, a summary for policymakers, two participatory videos, an issue paper and a GIS story map, in collaboration with the project partners and fisherfolk, dive and tour operators and other coastal and marine resource users. These products were used for knowledge exchange and advocacy on the need to mainstream climate change adaptation and build resilience within the fisheries sectors in Anguilla and Montserrat and the wider Caribbean.

Two posters were developed for each island that summarise the key findings from the vulnerability assessment conducted using P3DM and priorities for adaptation identified by stakeholders for the fisheries of Anguilla and Montserrat. These posters were drafted and shared with project partners for review and feedback before finalisation in November 2018. The posters were then presented in a series of meetings with fisherfolk and other coastal community stakeholders in Anguilla and Montserrat to enhance awareness of local climate change impacts and vulnerabilities and discuss relevant adaptation priorities and actions to inform CCA for the fisheries sector. The posters were put on display at key fish landing sites and other fishing facilities for outreach to fisherfolk as well as at community centres, public libraries and other public offices in Anguilla and Montserrat for outreach to wider coastal community stakeholders. Also, the posters were showcased at the 71<sup>st</sup> Gulf and Caribbean Fisheries Institute annual conference from November 5-9, 2018 in San Andres, Colombia. Copies of the posters can be found in Annex 6-5. A summary for policymakers - *Are we ready to adapt to climate change? An institutional assessment of the Anguilla and Montserrat fisheries sectors* - highlighting the key findings from the assessment of institutional readiness for adaptation and priorities for institutional strengthening in the Anguilla and Montserrat fisheries sectors was also developed (see Annex 6-6). This summary was disseminated in hard copy to key policy makers and resource managers in Anguilla and Montserrat from June 2019 to March 2020 to mobilise action to create an enabling environment and mainstream adaptation into fisheries management and shared via CANARI's website, social media and listservs to other Caribbean stakeholders including regional agencies such as the Organisation of Eastern Caribbean States (OECS) Commission, national environmental and fisheries authorities and environmental CSOs.

Participatory video was used as a tool for documenting local perspectives and stories on climate change, its impacts and priorities for action in the fisheries sector. The videos aimed to enable awareness raising and advocacy on the need for adaptation and building the resilience of fisherfolk, their livelihoods and key fisheries and marine resources. Workshops were held on December 6, 2018 in Anguilla and November 28, 2018 in Montserrat targeting fisherfolk. The workshops introduced the fisherfolk, as well as dive and tour operators and staff from management agencies, to participatory video and built their capacity to develop a theme, storyboard and script, and collect and edit video footage to produce their own videos. In Montserrat, a video and photo contest was also held to engage wider stakeholders, such as youth and coastal community residents, in capturing and sharing local stories on climate change, its impacts on fisheries and marine resources and related livelihoods and potential adaptation actions. Based on the two workshops and contest entries from Montserrat, videos were produced with fisherfolk and other coastal and marine resource users, entitled "*Anguilla's Fishing Dilemma*" (<https://www.youtube.com/watch?v=lerKOUQP5o&t=1s>) and "*Our Changing Fisheries: Voices from Montserrat*" ([https://www.youtube.com/watch?v=sHbVbjlWI\\_8&feature=youtu.be](https://www.youtube.com/watch?v=sHbVbjlWI_8&feature=youtu.be)). Fisherfolk in Anguilla and Montserrat identified key policy makers to target for video dissemination from April to December 2019 in order to promote dialogue and mobilise support to address their priority needs and implement adaptation actions within the fisheries sector. Both videos are also available on CANARI's YouTube Channel, and Anguilla's Government Information Service broadcast the

Anguilla video on monitors in the Post Office, Inland Revenue and other public offices as part of its programming in 2019.

CANARI further designed and facilitated one-day capacity building workshops on December 5, 2018 in Anguilla and November 27, 2018 in Montserrat on “*Communicating effectively about climate change impacts and actions for fisheries and marine resources*”. These workshops were held in conjunction with workshops to develop the participatory videos in Anguilla and Montserrat, and targeted key government agencies, civil society (including fisherfolk and their organisations) and dive and tour operators involved in fisheries and coastal and marine resource management. The workshops focused on building stakeholders’ capacity to develop communications plans, including determining specific objectives, target audiences, key messages and appropriate communication products and pathways and evaluate their effectiveness, and be more strategic in their communications for climate change awareness and advocacy moving forward. Copies of the communications and participatory video training workshop reports can be found in Annex 6-7.

Additionally, an issue paper and GIS story map were developed in March 2020 synthesising key lessons, best practices and recommendations from the project for further enhancing climate change adaptation in both the UKOTs and wider Caribbean small-scale fisheries sector and building coastal and marine resilience. The issue paper, “*Rising to the climate challenge: Coastal and marine resilience in the Caribbean*”, highlighted key issues, challenges and lessons from this Darwin Plus project and other CANARI projects to empower vulnerable coastal communities, fisherfolk and other coastal and marine resource managers and users to build resilient coastal and marine ecosystems and livelihoods in the Caribbean region using a participatory and socially inclusive approach (See Annex 6-8). Targeted at practitioners, policy makers and funding agencies, including ministers and heads of fisheries and resource management authorities and regional agencies such as the OECS Commission and Caribbean Community (CARICOM) Secretariat, the issue paper is being disseminated in hard copy and electronically via CANARI’s website, listservs and social media. The GIS story map (<https://arcg.is/LWOfy>) was developed as an interactive multimedia tool that combines maps with narrative text, images, video and other media to tell a compelling story about the project, its key activities and results and showcase the various communication products and other outputs developed over the three years. Written in simple language, the story map aimed to raise awareness about the project and its results among coastal communities, fisherfolk and the general public in Anguilla, Montserrat and the wider Caribbean. The story map has been shared via CANARI’s and partners’ websites, online knowledge hubs and social media.

### **Awareness and advocacy products and other events on ecosystem stewardship**

Field visits were organised as part of the EAF and Stewardship workshops in Anguilla and Montserrat in January 2019 under outputs 3 and 4 to facilitate hands-on learning and peer exchange among fisherfolk, dive and tour operators, and coastal and marine resource managers. The visits focused on raising awareness about ecosystem stewardship and its value in building resilience in the fisheries sector (see the workshop reports in Annex 6-10). Current initiatives, lessons and best practices were showcased as part of the field visits. This included innovative work in both islands. In Anguilla, visits featured work by the Anguilla National Trust, DFMR and the Department of Environment using lobster pots to create an artificial reef and engage fisherfolk in managing the area. In Montserrat, visits featured work by the Montserrat National Trust, Fisheries and Ocean Resources Unit, Department of Environment and Waitt Institute to conduct marine spatial planning in Montserrat and identify zones for fishing, marine managed areas and recreation to enhance conservation and sustainable resource use.

Fisherfolk organisations represented by the Caribbean Network of Fisherfolk Organisations (CNFO) and other CSOs were also engaged through virtual online consultations to provide inputs into the development of the Civil Society Action Programme (C-SAP) 2018-2030 for Sustainable Management of the Shared Living Marine Resources in the Caribbean and North Brazil Shelf Large Marine Ecosystems (CLME+) project. This programme has identified key strategies and actions to guide the work of CSOs and community enterprises, and the government agencies and donors that support them, to better manage the Caribbean Sea. It was developed by CANARI as part of the wider United Nations Development Programme/Global Environment Facility CLME+ project. It is aligned with the ten-year CLME+ Strategic Action Programme that was politically endorsed by 25 governments and 6 overseas territories, including Montserrat. The C-SAP has included a specific priority action on building resilience to climate change and several actions on sustainable small-scale fisheries, and was formally endorsed by both the Anguilla Fisherfolk Association and

Montserrat Fishing and Boaters Association and actions under their small grant projects directly contributed to achieving its priorities (see Output 4).

### **Peer exchanges**

Peer exchange and learning among the project partners, namely DFMR, Fisheries and Ocean Governance Unit – MATLHE and fisherfolk and their organisations in Anguilla and Montserrat, was facilitated through two key activities. At the inception workshop in Montserrat, the two Anguillan representatives, Mr. Chavez Edwards, Fisheries Officer, DFMR and Mr. Sherwin Richardson, Member, Anguilla Fisherfolk Association, were able to share knowledge about Anguilla's fisheries sector, its practices and challenges and were exposed to the fishery in Montserrat and key challenges due to climate change and ongoing volcanic activity during a field trip on August 31, 2017 (see the inception workshop report in Annex 6-1).

Also, in keeping with the efforts to create synergies with complementary projects, a “*Fisheries Learning Exchange for climate change adaptation, disaster risk management and EAF among Anguilla, Montserrat and Saint Lucia*” was arranged from April 23 - 27, 2018, between this Darwin Plus project and the Climate Change Adaptation in the Eastern Caribbean Fisheries Sector Project (CC4FISH) implemented by CANARI and supported by the Food and Agriculture Organization of the United Nations (FAO). This exchange involved a fisherfolk leader, Keith Harrigan, and Fisheries Extension Officer, Chavez Edwards, from Anguilla, a fisherfolk leader, Sheldon Carty, from Montserrat, and a resource person, Dr. Shelly-Ann Cox, from CERMES going to Saint Lucia. The aim of the exchange was to expose the participants from Anguilla and Montserrat to the efforts being made in Saint Lucia to improve climate change adaptation in the fisheries sector at the national and local levels and enhance livelihood opportunities and stewardship, using EAF. The sharing of experiences and lessons involved presentations, informal discussions, hands-on demonstrations, tours and an in-water visit to a coral reef nursery with Saint Lucia's Department of Fisheries, Goodwill and Soufriere Fisherman's Cooperatives, Saint Lucia National Trust and the Soufriere Marine Management Area Authority. The summary report of the fisheries learning exchange was finalised and disseminated to fisheries stakeholders in Anguilla and Montserrat (see Annex 6-9 for a copy of the report).

A third fisheries learning exchange in Anguilla, which was carded for March 18-20, 2020 to facilitate sharing of experiences and lessons from this Darwin Plus project and other fisheries and coastal and marine initiatives in Anguilla, was unfortunately cancelled due to the COVID-19 pandemic. CANARI and project partners also attended a number of regional conferences and meetings where they shared key results, lessons and recommendations for wider knowledge exchange.

### **Output 3: Actions taken to mainstream adaptation to climate change and variability in fisheries-related policies and plans of Anguilla and Montserrat using EAF**

#### **Capacity building workshops on mainstreaming adaptation into fisheries-related policies and plans using EAF**

CANARI and CERMES designed and co-facilitated a combined 4-day capacity building workshop on “*Mainstreaming climate change adaptation, disaster risk management and stewardship in fisheries management using EAF*” in Anguilla from January 22-25, 2019, and in Montserrat from January 28-31, 2019. The design of the workshops drew on the CC4FISH project's regional EAF Training workshop in July 2018, which was developed by CERMES based on FAO's EAF Toolbox. The workshop targeted policy makers, resource managers and users, including fisherfolk and their organisations. Days 1-3 of the workshop focused on EAF and sought to increase knowledge and awareness of the EAF concept and planning process, including the key steps of initiation and planning, identifying and prioritising issues, developing the management system, and implementing and monitoring. Copies of FAO EAF Toolbox were provided to target stakeholders to support further capacity building in country, including the DFMR in Anguilla and Fisheries and Ocean Governance Unit in Montserrat. As part of the workshop, stakeholders were given the opportunity to apply EAF to support identifying and implementing steps to update fisheries-related policies and plans and systematically integrate adaptation and disaster risk management considerations. In Anguilla, the focus was on updating the small coastal pelagics (jacks) fisheries management plan under the 2015 Anguilla Fisheries Development Plan. In Montserrat, the focus was on updating the draft 2006 Montserrat Fisheries Plan. See Annex 6-10 for a copy of the workshop reports.

#### **Developing and updating fisheries plans to mainstream adaptation using EAF**



Based on stakeholder inputs at the workshops, and a comprehensive desk review, CERMES then prepared two reports on technical inputs for updating Anguilla's Small Coastal Pelagics Fisheries Management Plan using EAF and updating Montserrat's Fisheries Plan using EAF, with inputs from the DFMR and Fisheries and Ocean Governance Unit respectively (see Annex 6-11 for the reports). Drawing on these technical inputs, CERMES worked from June 2019 to February 2020 to develop Anguilla's Small Coastal Pelagics Management Plan and update the draft Montserrat Fisheries Plan to integrate climate change adaptation and disaster risk management using EAF (see Annex 6-12 for the draft plans). These draft fisheries plans were reviewed and accepted by the DFMR in Anguilla and the Fisheries and Ocean Governance Unit in Montserrat in February 2020 and the process initiated for wider stakeholder review and formal approval as of March 2020 in both UKOTs. With these draft fisheries plans, one priority area for improving institutional readiness to adapt in the fisheries sectors of Anguilla and Montserrat has been successfully addressed by this project and the enabling environment for climate change adaptation and building resilience strengthened.

### **Additional activities**

CANARI presented at the 5<sup>th</sup> OECS Meeting of the Council of Ministers of Environmental Sustainability (COMES 5) in Montserrat from July 9-11, 2018, on the theme of "Building resilience on the frontlines of climate change". As part of this presentation, CANARI showcased work under this Darwin Plus project and displayed the completed 3-D model of Montserrat with the support of MATHLE representatives at the COMES 5 exhibition as an example of a proven tool for assessing vulnerability using a participatory, ecosystem-based approach and identifying priorities and actions for adaptation to mainstream climate change into development planning. The 3-D model was well received, and CANARI also successfully advocated for the inclusion of community-based and ecosystem-based approaches to adaptation as a key resilience building strategy for OECS member states, including Anguilla and Montserrat, as a formal recommendation of the COMES 5 meeting. The COMES Paper No. OECS/COMES/18/05/08 "Ecosystem-Based Approaches to Risk Reduction in Communities" recommended that the Council of Ministers:

1. **NOTE** the multiple benefits of ecosystem-based approaches for enhancing community resilience, contributing to the sustainable development agenda and meeting obligations of MEAs;
2. **PROMOTE and ENCOURAGE** the mainstreaming of ecosystem-based (green or green – grey solutions) approaches into national and regional strategies (including adaptation, disaster risk management, environmental and other sustainable development policies);
3. **MANDATE** the OECS Commission to assist in mobilizing financial and other requisite resources to support the integration and promotion of ecosystem-based approaches in community level interventions in Member States;
4. **MANDATE** the OECS Commission to collaborate with organisations (regional and international) that are engaged in the implementation of resilience building projects and programmes to ensure that ecosystem-based approaches are adequately incorporated in Member States, as appropriate.

Additionally, CANARI presented at the 6<sup>th</sup> OECS Meeting of the Council of Ministers of Environmental Sustainability (COMES 6) in Martinique from May 15-17, 2019, on the theme "Towards a Sustainable Caribbean Society". CANARI shared lessons from the project with ministers and key OECS Commission staff to promote climate change adaptation and ecosystem stewardship to ensure sustainable fisheries and marine resources and resilient fisheries-related livelihoods and to contribute towards a blue-green economy in the region. At the meeting, the critical challenge of sargassum seaweed influxes and impacts on the fisheries and tourism sector was also highlighted, and an OECS discussion paper disseminated to delegates. The ministers and OECS Commission committed to developing a coordinated strategy to support research, technologies and solutions on sargassum in the Eastern Caribbean, including in the French, Dutch and UK overseas territories.

### **Output 4: Capacity of fisherfolk and their organisations in coastal communities strengthened to undertake practical actions incorporating climate change adaptation and ecosystem stewardship to improve livelihoods in Anguilla and Montserrat**

#### **Capacity building workshops on ecosystem stewardship**

As noted under Output 3, a combined 4-day capacity building workshop was held on "*Mainstreaming climate change adaptation, disaster risk management and stewardship in fisheries management using EAF*" in Anguilla and in Montserrat. Days 3 and 4 of the workshop focused on ecosystem stewardship, highlighting the importance of fisherfolk and their dependents taking greater ownership for the conservation and sustainable use of fisheries and marine resources that

are the basis of their livelihoods. This included a discussion with fisherfolk on the changes observed in Anguilla's and Montserrat's fisheries, existing threats from coastal development, overharvesting, pollution and invasive species and the ways in which climate change compounds these threats. The discussion also noted the need to evolve from conventional fishing methods and top-down management practices to a stewardship approach that engaged fisherfolk and other coastal and marine resource users in ensuring the sustainability of their fisheries. See Annex 6-10 for copies of the workshop reports.

### **Small grants to support practical adaptation and ecosystem stewardship actions by fisherfolk**

CANARI established a £ (US\$) small grant facility with Darwin Plus funding under its Caribbean Sea Innovation Fund (CarSIF) in March 2019 to support fisherfolk organisations in Anguilla and Montserrat to implement practical action projects on climate change adaptation and ecosystem stewardship and build the resilience of fisheries and related livelihoods. CANARI developed and issued a request for proposals, including selection criteria to identify eligible fisherfolk organisations and adaptation and stewardship activities for funding in both UKOTs, in collaboration with the project partners. CANARI also provided one-on-one mentoring to eligible fisherfolk organisations in Anguilla (Anguilla Fisherfolk Association and Anguilla Fishing Cooperative) and Montserrat (Montserrat Fishing and Boaters Association and Montserrat Fishermen's Cooperative) to help them develop their project proposals. The design of and approach to the small grant facility drew on lessons and best practices from past small grant mechanisms for fisherfolk and their organisations that CANARI has managed successfully across the Caribbean region.

In Anguilla, the Anguilla Fisherfolk Association was awarded a small grant of £ (US\$) from the small grant facility for their project, *"Increasing safety at sea and stewardship among Anguillan fisherfolk to build climate change resilience"*. This project was implemented in collaboration with the Anguilla Fishing Cooperative, as well as the Anguilla National Trust, DFMR and Department of Disaster Management, from August 15, 2019 to February 14, 2020. They collected data on incidents at sea, convened a safety at sea workshop to highlight findings and possible solutions and organised 3-day training in First Aid/cardiopulmonary resuscitation (CPR) and water safety for Anguilla's fishers, given more extreme weather events and rougher seas due to climate change. Approximately 20 fisherfolk were engaged as part of these activities and 15 of them were certified in First Aid/CPR and water safety. Additionally, members of the Anguilla Fisherfolk Association and Anguilla Fishing Cooperative helped restore coastal and marine habitats in the Prickly Pear Marine Protected Area in Anguilla by constructing and deploying over 100 lobster traps to create a habitat for the Caribbean spiny lobster and collecting bluestone to create an artificial reef to address degradation of coral reefs and reef-based fisheries. This built on work under another Darwin Plus project, *"Pioneering a New Model of Marine Park Management in Anguilla"*, implemented by the DFMR, ANT, Fauna and Flora International and the University of Roehampton, UK. These ecosystem stewardship activities enhanced awareness and action on climate change and other environmental threats facing the marine protected area among 27 coastal and marine resource users, including 12 fishers and 2 sport fishers and dive operators.

In Montserrat, the Montserrat Fishing and Boaters Association was awarded a small grant of £ (US\$) from the small grant facility for their project, *"Building resilience to climate change in Montserrat's fisheries through climate-smart practices and stewardship"*. This project was implemented in collaboration with the Montserrat Fisherman's Cooperative from August 16, 2019 to February 14, 2020. They conducted climate smarting of fish aggregating devices (FADs) and fish traps to make them more resilient and environmentally friendly. This included repairing and outfitting one existing deep sea FAD with a GPS-enabled buoy, reflectors and more robust ropes and installing fish finders in 2 fishing boats to facilitate fishing and monitoring at the FADs. Montserrat's fishers were also surveyed to provide inputs to proposed FAD management guidelines being developed by the Fisheries and Ocean Governance Unit. 22 fish traps from 12 fishers were also modified to add escape doors to reduce 'ghost fishing'. Ghost fishing occurs when lost traps continue to fish and lead to death of target and non-target fish trapped in gear. Ecosystem stewardship was also encouraged through organising a 'fishers against marine litter' campaign. This included a beach clean-up by members of the Montserrat Fishing and Boaters Association where 190 bags of garbage were removed over 2 days from Margarita Bay. Improving FADs and fish traps and related fishing practices and reducing marine litter and pollution will help to decrease pressure on nearshore fisheries and marine habitats, which are facing threats from climate change, coastal development and ongoing volcanic activity in Montserrat. See Annex 6-13 for proposals and final reports from the Anguilla and Montserrat fisherfolk organisations' small grant projects. See Annex 6-

14 for summary reports of small grant projects that were shared to key stakeholders and the wider public in Anguilla, Montserrat and other Caribbean islands via CANARI's website, social media and listservs and the fisherfolk organisations' social media.

To help build the capacity of the four fisherfolk organisations engaged in the small grant projects in Anguilla and Montserrat, and facilitate 'learning by doing', CANARI also assigned two mentors to support the fisherfolk organisations in delivering their projects. They provided coaching and mentoring to the fisherfolk organisations on project management, monitoring and evaluation and reporting, especially as it was their first time leading on a project. This support was largely provided virtually, as the CANARI mentors were based in Trinidad and Tobago, and relied on the use of emails, WhatsApp and Skype for regular communications. Both mentors noted that the fisherfolk organisations gained improved confidence and ability to design and implement project activities, communicate on results, mobilise partners and oversee a budget. However, there needed to be more active engagement of fishers and other community stakeholders and improved monitoring and reporting. See Annex 6-15 for the mentoring reports for results achieved, key challenges and recommendations for future capacity building of the four fisherfolk organisations.

### **3.2 Outcome**

The project has made significant strides in achieving the outcome, "Adaptation to climate change and variability mainstreamed into fisheries governance and management using EAF in Anguilla and Montserrat". It has supported fisheries authorities, fisherfolk and other coastal and marine resource users to identify key vulnerabilities and adaptation priorities and mobilised knowledge and action through awareness raising, advocacy, capacity building and institutional strengthening to address these vulnerabilities and adapt and build resilience in the fisheries sectors of Anguilla and Montserrat.

The project has built the enabling conditions to support mainstreaming of climate change adaptation in the fisheries sector in both UKOTs over the long term through:

- creating strong networks for sharing and integrating local and scientific knowledge to inform planning and decision-making;
- catalysing a culture of a 'bottom-up' and ecosystem-based approach to fisheries governance and management;
- enhancing capacity and action at the national and community levels to undertake vulnerability assessments and adaptation planning and communicate about climate change and potential adaptation actions;
- instilling a sense of ownership by fisherfolk in the adaptation actions identified and promoting ecosystem stewardship;
- facilitating sharing of lessons and best practices among policy makers, resource managers and fisherfolk and other resource users in Anguilla and Montserrat; and
- strengthening the enabling environment for climate change adaptation and EAF through updating fisheries related policies and plans to provide strategic guidance.

Based on the project evaluation, which included a lessons learned workshop and surveys in Anguilla and Montserrat, stakeholders highlighted the development of the draft Small Coastal Pelagics Fisheries Management Plan for Anguilla and updated draft Fisheries and Ocean Resources Plan for Montserrat as key steps in institutionalising climate change adaptation within fisheries governance and management in both UKOTs. Building the capacity of fisherfolk and their organisations, and their government and civil society partners, to design and deliver practical actions on climate change adaptation and ecosystem stewardship was also highlighted. Although the fisheries sector is identified as a vulnerable sector in both UKOTs, there have not been any specific projects focused on building adaptive capacity and resilience within the sector previously. Enhancing knowledge and skills to identify adaptation options and implement measures, such as climate smart fishing gear and practices, improving safety at sea and restoration of supporting ecosystems such coral reefs and mangroves, was seen as particularly valuable. The project targeted a total of 45 fishers in Anguilla and 36 in Montserrat and built their capacity through various training workshops and the small grant practical action projects.

Additionally, stakeholders noted having a better appreciation for the need for collective action to address climate change, disasters and other issues facing the fisheries sector, including actively engaging fisherfolk and other coastal and resource users and ensuring they have a voice and their

knowledge and practices are taken into account in decision making. The project fostered stronger connections and partnerships among fisherfolk, fisheries authorities and other management agencies, such as the environment, disaster and physical planning authorities, and CSOs, such as the Anguilla National Trust, that can mobilise action and resources for adaptation and building resilient fisheries and marine ecosystems and livelihoods.

However, due to factors outside of CANARI's control, the project has not fully achieved the outcome as the updated fisheries plans have not yet been formally approved and operationalised. Stakeholders noted that many policies and plans have remained in draft for long periods and hoped the DFMR in Anguilla and the Fisheries and Ocean Governance Unit in Montserrat would work closely with relevant authorities to formalise these plans by the end of 2020. While a number of fisherfolk and other key stakeholders were actively engaged and built their capacity, the level of engagement was not as high as expected, especially at the start of the project. This highlighted key constraints for fisherfolk leaders, who found it difficult to mobilise other fisherfolk and to find time to participate in meetings, trainings and small grant activities given their other livelihood concerns and commitments. A number of capacity gaps and areas for strengthening fisherfolk organisations and engagement of their members and other fisherfolk were identified in the mentoring reports (see Annex 6-15) which highlighted the need for parallel work on technical and organisational capacity building for fisherfolk to support effective adaptation in the fisheries sector.

See Annex 6-16 for summary of findings from the participatory evaluation of the project.

### **3.3 Monitoring of assumptions**

CANARI, with oversight from the Project Steering Committee, monitored and assessed risks to the project on an ongoing basis and documented any changes in assumptions and risks in half-year and annual reports over the period. Notably, the risk of natural hazards, such as hurricanes, and infectious diseases, such as COVID-19, have proven the most disruptive although not originally identified in the project proposal.

The severe impacts of Hurricane Irma on Anguilla in September 2017 and subsequent recovery efforts led to delays in implementation of the vulnerability and institutional readiness assessments in Year 1. CANARI therefore sought to schedule activities outside of the peak hurricane period from July to October where possible to mitigate these risks in Years 2 and 3.

COVID-19, which was declared a pandemic by the World Health Organisation on March 11, 2020, and related restrictions on travel and public gatherings also disrupted the final project activities. The Anguilla Lessons Learned workshop carded for March 16-17, 2020 and fisheries learning exchange carded for March 18-20, 2020 in Anguilla had to be cancelled. Instead, CANARI conducted phone and online surveys to gain inputs from Anguillan stakeholders on project results, lessons and recommendations for the final evaluation (see Annex 6-16). However, there was no meaningful alternative for the fisheries learning exchange as an in-person event would have been much more valuable for "learning by doing", capacity building and networking by fisherfolk and fisheries authorities' staff. Anguilla and Montserrat fisherfolk were also unlikely to engage in a virtual peer exchange due to poor internet access in both UKOTs and lack of familiarity with virtual meeting software. CANARI and project partners have thus sought to share the summary reports of the small grant projects and the GIS story map of the project results and lessons among fisherfolk and their organisations and other key stakeholders in both UKOTs and with the CNFO and other national fisheries authorities to facilitate knowledge exchange and learning across these territories and the wider Caribbean fisheries sector.

CANARI also noted in Year 1 that, while stakeholders in both UKOTs were willing to share information and participate in workshops and on the ground activities, fisherfolk participation was lower than expected especially in Montserrat. This was due to the low capacity of the fisherfolk organisations to mobilise their members and fisherfolk' needed to go about earning their livelihoods. This lack of engagement was addressed in Years 2 and 3 by actively engaging fisherfolk leaders in the Project Steering Committee and working closely with trusted local mobilisers in Anguilla and Montserrat to raise awareness of fisherfolk and coastal communities about the project and its benefits and mobilise them to participate in activities. The result was significantly higher turnout and engagement of fisherfolk, who were key stakeholders and beneficiaries, in workshops and on-the-ground activities in Years 2 and 3.

Capacity and time constraints within the fisherfolk organisations in Anguilla and Montserrat also led to longer than expected delays in proposal development and implementation of the small grant projects under Output 4. The fisherfolk organisations' leaders found it difficult to mobilise other fisherfolk and to find time to meet and come to consensus on activities given their other livelihood concerns and commitments. Consequently, the small grant agreements were signed in mid-August 2019 rather than in early July 2019 as planned, and a number of planned small grant activities did not occur due to further delays during implementation. CANARI engaged the DFMR and Fisheries and Ocean Governance Unit – MATLHE and local mobilisers to provide additional on-the-ground support to enable more timely and effective implementation of the small grant projects from November 2019 to February 2020. Additionally, one of the grantees, the Montserrat Fishing and Boaters Association, fell victim to online fraud whereby they unknowingly paid £ to procure equipment to a false account in October 2019. This led to delays in implementation as the grantee liaised with their bank and the suppliers to resolve the situation and had to place another order for this equipment and wait for its shipment to Montserrat. While CANARI put in place measures to avoid other grantees from facing this situation, the need to build fisherfolk organisations' capacity for financial management, including procurement, for effective project management was highlighted.

#### **4 Project support to environmental and/or climate outcomes in the UKOTs**

The project contributed to improved conservation and management of the marine environment in Anguilla and Montserrat by promoting ecosystem stewardship among fisherfolk and other coastal and marine resource users and an ecosystem approach to fisheries governance and management that integrates climate change adaptation, disaster risk management and sustainable use of fisheries and marine resources. Through a participatory approach and engagement of key stakeholders in the public and private sectors and civil society, including fisherfolk organisations, the project also enhanced capacity and action at the national and community level to undertake vulnerability assessments, communicate about climate change and potential adaptation options, and plan and implement practical actions for adaptation and ecosystem stewardship that build resilience.

As such, the project has supported Anguilla and Montserrat in implementing their national environmental and development policies and plans, including Anguilla's National Biological Diversity Strategy and Action Plan (2009) and Fisheries Development Plan (2015) and Montserrat's Action Plan for the Conservation and Environmental Management Act (2014), and meeting their commitments (e.g. 1, 2, 3, 5, 6, 10 and 11) under the UKOT Environmental Charters. It also supported Anguilla and Montserrat in meeting their international commitments as UKOTs to the Convention on Biological Diversity and the Aichi Biodiversity Targets (e.g. 6, 10, 14 and 19), the United Nations Framework Convention on Climate Change and the Sustainable Development Goals (including Goal 13 on climate action and Goal 14 on life below water), and regional efforts to implement the Caribbean Community's Common Fisheries Policy and Eastern Caribbean Regional Ocean Policy.

#### **5 OPTIONAL: Gender equality**

The project sought to ensure equal gender opportunities, and a participatory and socially inclusive approach, whilst respecting the cultural norms within both the UKOTs. However, there are few women currently involved across the fisheries value chain within Anguilla and Montserrat, with only 1-2 women fishers and a few women involved in fish processing and sales in each territory. Women are mainly involved in the fisheries sector as staff within government agencies, including the DFMR and Fisheries and Ocean Governance Unit – MATLHE. As such, the project focused on ensuring gender sensitivity in communications and stakeholder engagement and that both genders were adequately represented in consultations and capacity building activities, targeting at least 50% women in the participatory 3-D modelling to assess vulnerabilities, climate communications workshop and the EAF training workshops. Specific consideration was given to the location, length and timing of events to accommodate stakeholders who have parental and livelihood duties. The small grant projects implemented by the fisherfolk also sought to encourage women's inclusion, for example, fishers' partners (wives and girlfriends) participated in First Aid/CPR training and safety at sea consultations in Anguilla and fishers' families (wives, girlfriends and children) participated in the beach clean-up as part of the 'fishers against marine litter' campaign in Montserrat.

## 6 Sustainability and Legacy

The following actions were taken to ensure long-term sustainability and impact in both UKOTs:

- Working closely with the partner agencies, DFMR in Anguilla and the Fisheries and Ocean Governance Unit in Montserrat, to plan and execute the project activities to ensure their buy-in and continued efforts to mainstream climate change adaptation in their fisheries sectors.
- Building the capacity of key resource managers and users, including the fisheries authorities, fisherfolk and their organisations, to assess vulnerability and design and implement adaptation measures using EAF via training and ‘learning by doing’ through the participatory 3-D modelling and small grant action projects.
- Integrating adaptation and disaster risk considerations into fisheries plans in Anguilla and Montserrat using EAF and fostering a culture of participatory planning and policy development through enhanced ability among key resource managers and users, including the fisheries authorities, fisherfolk and their organisations, to communicate more strategically on climate change and enable stakeholder buy-in and engagement.
- Instilling a sense of ownership among fisherfolk of the adaptation priorities and actions adopted and promoting stewardship of fisheries and marine resources for improved conservation of marine biodiversity and sustainable livelihoods.
- Documenting and sharing lessons and best practices among resource managers and users, and other stakeholders in UKOTs and the wider Caribbean, for knowledge exchange and learning to support scale-up and replication.

In the final project evaluation, Anguilla and Montserrat stakeholders further noted that tools, such as the 3-D models and participatory videos, and the enhanced awareness and capacity of the fisheries authorities and fisherfolk to adapt and apply EAF would ensure impact beyond the project. The physical 3-D models were recognised as a multi-purpose and interactive tool that can be used for land and marine spatial planning purposes in various sectors and used to gain appreciation for other issues (e.g. flooding and land development) and demonstrating the ‘ridge to reef’ concept. The 3-D models and associated GIS maps and databases of Anguilla and Montserrat were made available for use by other sectors to facilitate further data collection and analysis building on the fisheries-related information from the models and identify cross-sectoral linkages and relevant measures. The participatory videos and all training materials from capacity building workshops, including workshop reports and the FAO EAF Toolbox, were all disseminated to participants and made available online to facilitate future capacity building.

Additionally, stakeholders in both UKOTs noted that the updated draft fisheries plans that integrate adaptation, disaster risk management and EAF were a key means for institutionalising climate change adaptation and resilience building in the fisheries sector, but their finalisation and approval and adequate financing would be needed to ensure long-term impact.

## 7 Lessons learned

Key lessons for both UKOTs identified by CANARI and the Project Steering Committee, and highlighted by stakeholders in the final project evaluation surveys and the Lessons Learned workshop in Montserrat, included:

- EAF highlighted that fisheries are integrated social-ecological systems, requiring not only a focus on conserving fisheries and marine ecosystems but sustaining livelihoods and good governance. A “bottom up” approach is needed to ensure the effective engagement of fisherfolk, coastal communities and other resource users and that actions to build ecosystem resilience are responsive to local needs, especially of the most vulnerable, and contribute to socio-economic resilience.
- Recognising the local and traditional knowledge of fisherfolk, coastal communities and other resource users as a key resource, participatory information and communication technologies (ICTs), such as participatory 3-D modelling and participatory video, served as effective tools to capture and share this local and traditional knowledge to improve understanding local climate change impacts and vulnerabilities and identify adaptation priorities and appropriate actions for the fisheries sector.
- Effective capacity building of resource managers and users, including fisheries authorities and fisherfolk and their organisations, requires training as well as practical applications and mentoring to enable ‘learning by doing’ so they can fully grasp EAF and how it can be used to integrate climate change adaptation and disaster risk management into fisheries management

including policies, plans and on-the-ground interventions. Allowing the DFMR, Fisheries and Ocean Governance Unit and other stakeholders in Anguilla and Montserrat to apply EAF to update specific fisheries plans, and the fisherfolk to implement practical action projects on adaptation and ecosystem stewardship, was more effective in enhancing their knowledge and skills.

- Strong and active fisherfolk organisations are important as platforms to allow fisherfolk to make collective decisions and have effective voice and representation in fisheries management and climate change adaptation planning and decision-making in Anguilla and Montserrat. This organisational strengthening includes ensuring there is an active executive and improved ability to write proposals and manage projects and finances.
- Taking into account the demographics of the fisherfolk and other coastal and marine resources users is important for effective communication and stakeholder engagement. For example, in Anguilla, there are more fishers under 30 years who are very familiar with ICTs and social media, including Facebook and YouTube. In Montserrat, the population of fishers and other residents is much older and less familiar with ICTs and social media. The consequence was a distinct difference in how fishers and coastal communities engaged with the project, with greater willingness and capacity to engage with ICTs, such as developing the participatory video, and social media in Anguilla and heavier reliance on face-to-face interaction in Montserrat.
- With limited human resources and heavy commitments within the partner agencies, DFMR and Fisheries and Ocean Governance Unit, and the fisherfolk organisations in Anguilla and Montserrat, a trusted local mobiliser to support logistics and mobilisation for in-country project activities can be a highly effective means to enable stakeholder participation and project implementation without overburdening local partners.
- More practical activities, such as beach and reef clean ups, and peer exchange and learning were needed to allow for hands-on learning by fisherfolk and other resource users and demonstration of ecosystem stewardship actions and related impacts on fisheries and their livelihoods, rather than the stewardship workshop (see section 3.1) under Output 4.

Stakeholder recommendations for moving forward and building resilience in the fisheries sectors in both the UKOTs include:

- Addressing the following key issues that relate to/compound climate change impacts:
  - Sargassum influxes affecting fisherfolk and other key sectors like tourism;
  - Degradation of coral reefs, including due to coral bleaching, affecting reef fisheries and feasibility of artificial reefs;
  - Land-based sources of pollution stressing fisheries and marine ecosystems; and
  - Safety at sea and need for insurance and social protection schemes for fisherfolk.
- Strengthening the capacity of fisheries officers and other relevant resource managers to undertake data collection, monitoring and reporting on climate related variables affecting the fisheries and marine resources and related livelihoods.
- Organisational strengthening of fisherfolk organisations to play a more active role in fisheries management, including climate change adaptation and ecosystem stewardship, and leveraging regional networks such as the CNFO to support this work.
- Further capacity building and piloting of climate-smart technology and methods, including FADs and fish pots, appropriate for the local context to enable adaptation.
- Engaging the private sector, including dive and tour operators, involved in coastal and marine management as they can play a key role in planning and implementing actions to adapt and build resilience in fisheries and related sectors.
- Targeting and involving schools as part of an education or vocational training programme to encourage youth to pursue fishing as a career/livelihood, especially as the population of fishers is aging in Montserrat, and to transfer knowledge from older to younger fishers.
- Increased outreach and awareness raising and capacity building on sustainable fishing practices (e.g. addressing ghost fishing and illegal, unreported and unregulated (IUU) fishing) for improved conservation and resilience of fisheries and marine ecosystems.
- Investing in enterprise development, improved marketing and adding value to fish and related products (e.g. through a processing facility), and use of underutilised species (e.g. Lionfish) for greater income generation and sustainable livelihoods for fisherfolk.
- Further knowledge exchange on best practices and innovations, including tools and approaches for climate change adaptation, EAF and stewardship, among other UKOTs and the wider Caribbean.
- Strengthening legal and policy frameworks for the fisheries sector, in addition to the updated fisheries plans, to support climate change adaptation, EAF and resilience.

- Enhancing regional collaboration to monitor and address marine pollution, particularly marine debris/litter that originates from neighbouring territories/countries.

## 7.1 Monitoring and evaluation

The project used participatory monitoring and evaluation (M&E) to assess its outputs, outcomes and impacts. M&E was conducted against the logframe and plans developed under the project, including the project communication strategy, to identify key results, lessons and recommendations. Outcome mapping<sup>1</sup> and the Most Significant Change (MSC) technique were also used alongside the logframe to assess behavioural changes and unexpected results.

CANARI led the participatory M&E with inputs from all partners via the Project Steering Committee. Semi-annual committee meetings were used to monitor and track the project's progress in achieving the outputs and outcomes using the indicators and means of verification in the project logframe. M&E was also facilitated through regular discussions among the CANARI Project Leader and team members and the focal points in the two UKOTs to keep them abreast of and involved in the project activities. Sessions at workshops and other events in each UKOT were also used to gain wider stakeholder inputs for M&E of project outputs at various stages of implementation. A Lessons Learned workshop was held in Montserrat and evaluation surveys conducted (in person, via phone and online) in Anguilla and Montserrat for the final evaluation at the end of the project to examine results achieved, including outputs and outcomes from logframe, lessons and recommendations for moving forward. The evaluation also examined the relevance, efficiency, effectiveness and sustainability of the project and its results, while the Lessons Learned workshop included an assessment of desired behavioural changes using outcome mapping. Utilising participatory M&E, including the outcome mapping approach and the MSC technique that engaged project partners and key beneficiaries, enabled rich analysis of findings and for stakeholders to learn and make informed decisions to maximise the impact of the project and buy in to the interventions. See Annex 6-16 for the final evaluation results.

Key findings from the final evaluation are summarised below in terms of effectiveness, most significant change, behavioural changes and unexpected results. Findings on results, including outputs and outcomes, lessons, recommendations and sustainability are already included in sections 3, 6 and 7. Findings on efficiency and value for money are included in section 9.3.

### **Effectiveness**

Stakeholders in both UKOTs generally expressed very positive feedback about the project partners and how effectively they performed their roles in implementing the project. CANARI was seen as effective in its role as lead implementer. CANARI staff were noted as being knowledgeable, having good facilitation and communication skills, allocating funding effectively, conducting work with professionalism, mobilising fisherfolk effectively and having good working relationships with DFMR and other local management agencies. In terms of mentorship, the fisherfolk organisations in both UKOTs noted that their relationships with the assigned CANARI mentors were positive and that the mentors were knowledgeable and provided adequate support throughout the small grant project lifecycles. It was indicated though that there could have been more working sessions, including face-to-face interactions, between the mentors and mentees.

Stakeholders recognised that the role of DFMR and the Fisheries and Ocean Governance Unit was to serve as the lead agency and project focal point in Anguilla and Montserrat, respectively, providing information and on-the-ground support and coordination. While most stakeholders rated them as effective in their roles, it was felt in a number of cases that they could have provided more support to mobilise and encourage the participation of fishers and other community stakeholders and to promote public awareness of the project locally.

CERMES was seen as effective in its role providing technical knowledge and support in the areas of fisheries management, climate change adaptation and socio-economics, and stakeholders found their relationship and interactions with CERMES to be positive. The EAF training led by CERMES was specifically highlighted as useful and well-coordinated.

### **Most significant change**

<sup>1</sup> Outcome mapping is a participatory method for planning and M&E focused on project stakeholders' behavioural changes and oriented toward social and organizational learning. See <https://www.outcomemapping.ca/>  
D+ Final Report Template 2020



At the individual level, the majority of stakeholders noted in both UKOTs that the project improved their understanding of the fisheries sector, climate change and its impacts, and adaptation challenges, particularly through knowledge and experiences shared by fisherfolk in the participatory 3-D modelling. One Anguillan fisher noted feelings of pride and empowerment from being able to share his knowledge – *“I enjoyed giving my suggestion as a seaman. I am knowledgeable of what is needed to help fishermen. So, by sharing my knowledge was a personal gain for me.”* The skills and knowledge gained from participation in practical trainings, such as the EAF workshop facilitated by CANARI and CERMES and as part of the small grant action projects implemented by the fisherfolk organisations, were also highlighted as impactful.

Stakeholders also reported having a better understanding of the role and initiatives of various organisations and an appreciation for the need for collective action to address issues related to climate change and sustainable fisheries and coastal and marine management, especially a need for the fisherfolk to be more united and engaged.

At the organisational/institutional level, the updated draft fisheries plans that integrate adaptation, disaster risk management and EAF were seen as a key means for institutionalising climate change adaptation and resilience building in the fisheries sector. However, their finalisation and approval would be needed to ensure long-term impact. Fisherfolk also highlighted positive impacts from the project such as closer working relationships among the two national fisherfolk organisations in each OT and with other key supporting agencies and improved capacity to implement small grant projects and give voice to and address fisherfolk needs and interests.

### **Behavioural changes**

Behavioural changes were identified and assessed for key actors based on outcome mapping at the Lessons Learned workshop in Montserrat. As the Lessons Learned workshop in Anguilla was cancelled, there was no outcome mapping to evaluate behavioural changes in its key actors.

For the Fisheries and Ocean Governance Unit in Montserrat, stakeholders noted that they had begun to incorporate EAF into fisheries management and take into account climate change adaptation, and there had been more concerted effort to harmonise fisheries and environmental laws and policies. It was further highlighted that effective leadership and ongoing training and opportunities to apply EAF are needed to inculcate these changes in the Unit, as well as ongoing efforts to engage and ensure buy-in of fisherfolk to this approach.

For the fisherfolk organisations, the Montserrat Fishing and Boaters Association and Montserrat Fisherman’s Cooperative, stakeholders noted that they developed confidence in implementing actions on climate change and ecosystem stewardship and showed willingness to participate in EAF. It was noted though that the level of participation of the organisations’ members and other fisherfolk was limited to an extent and this was an area for improvement. To foster wider behavioural change, stakeholders highlighted the need to get fisherfolk buy-in to organisations’ activities and to enable their adaptation, such as via safe harbour for fishing boats/gear, access to insurance and promoting climate-smart practices and stewardship.

For the Department of Environment in Montserrat, stakeholders noted that they had a better appreciation of climate change adaptation and were working to integrate it into coastal and marine management, including through harmonising fisheries and environment laws in collaboration with the Fisheries and Ocean Governance Unit. It was recommended that there be continued collaboration between these two agencies and improved public outreach and education for wider stakeholder buy-in and behavioural change. Other key actors that can be engaged and help influence behaviour are the Disaster Management Coordination Agency, Marine Unit – Royal Montserrat Police Service, Physical Planning Unit – MATLHE, Montserrat National Trust, dive and tour operators and the media in Montserrat.

### **Unexpected results**

Stakeholders in both UKOTs also identified unexpected results of the project. Notably, the Anguilla Fisherfolk Association gained a significant number of members as fishers saw the value and benefits of participating in the association due to its active participation in the Darwin Plus project and implementation of a small grant, which helped address their safety at sea concerns. In both UKOTs, there was also improved dialogue and partnerships among the two national fisherfolk organisations in each UKOT due to working jointly on the small grant projects, and among the

fisherfolk organisations and other agencies such as the disaster agencies, National Trusts and dive/tour operators, that had not typically partnered in the past.

## 7.2 Actions taken in response to annual report reviews

Based on the review of the annual Year 1 report, the project logframe was updated (see Annex 1) with inputs from the Project Steering Committee and more detailed updates to Year 2 and Year 3 plans were subsequently provided in half year and annual reports as requested.

## 8 Darwin Identity

The Darwin identity was promoted through:

- Ensuring that Darwin Initiative's logo was placed, along with the partners' logos, on all project materials including the project brief, publications, posters and videos.
- Acknowledging the UK Government's and Darwin Initiative's contribution to the project at all events, including meetings, workshops and field activities, in Anguilla and Montserrat and at regional events such as the Gulf and Caribbean Fisheries Institute (GCFI) conference and OECS ministerial meetings.
- Acknowledging the UK Government's and Darwin's contribution in all social media postings by CANARI and other partners on the project. During the period March 2018 to April 2020, there were 32 posts across CANARI's three social media platforms: 17 on CANARI's Facebook page (<https://www.facebook.com/CANARICARIBBEAN>); 11 on CANARI's Twitter account (<https://twitter.com/CANARICaribbean>); and 4 on CANARI's Instagram account ([https://www.instagram.com/canari\\_caribbean/](https://www.instagram.com/canari_caribbean/))<sup>2</sup>. These posts reached about 21,500 persons, used #climateredyfisheries and tagged @darwininitiative and @Darwin\_Defra. See Annex 6-17 for project's social media report.
- Acknowledging the UK Government's and Darwin's contribution to the project in all press releases and news articles. Press releases were made either at the start and/or end of the various actions, with the releases being distributed by CANARI, DFMR in Anguilla and Fisheries and Ocean Governance Unit in Montserrat using their websites and various listservs (e.g. FAO, GCFI and IUCN listservs) with over 3,600 contacts.

All communication products, and news, blogs and social media, can be found on CANARI's project webpage (<http://www.canari.org/climate-change-adaptation-in-the-fisheries-of-anguilla-and-montserrat>). Communication products were also disseminated via CANARI's online, open access Knowledge Hub (<https://hub.canari.org/>) and the GIS story map (<https://arcg.is/LWOfy>) summarising the project's activities, results and key lessons and recommendations.

As a result, there was a high level of visibility and familiarity with the Darwin Initiative and its work among the key project stakeholders, including the DFMR, Fisheries and Ocean Governance Unit, fisherfolk organisations, fisherfolk and coastal communities, in Anguilla and Montserrat and wider stakeholders, including the CNFO, GCFI, FAO, OECS Commission and their networks.

## 9 Finance and administration

### 9.1 Project expenditure

Project spend (indicative) since last annual report	2019/20 Grant (£)	2019/20 Total actual Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				

<sup>2</sup> Note CANARI's Twitter and Instagram accounts were set up in July and December 2019, respectively.  
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Project spend (indicative) since last annual report	2019/20 Grant (£)	2019/20 Total actual Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Capital items				
Others				
<b>TOTAL</b>				

Staff employed (Name and position)	Cost (£)
Nicole Leotaud, CANARI - Project management oversight; PM&E expert	
Ainka Granderson, CANARI - Project Leader; climate change adaptation expert	
Candice Ramkissoon, CANARI - GIS and disaster expert; communications and visibility	
Sasha Harrinanan, CANARI - Communication and visibility support	
Melanie Andrews, CANARI - Fisheries expert; capacity building; mentoring of Anguilla FFOs	
Venash Ramberan, CANARI - Financial management and accounting	
Anastacia Lee Quay, CANARI - Administrative and communication support	
Neema Ramlogan, CANARI - Support stewardship and mentoring of Montserrat FFOs	
Patrick McConney, CERMES - Fisheries expert	
Maria Pena, CERMES - Socio-economics expert	
<b>TOTAL</b>	

Consultancy – description and breakdown of costs	Other items – cost (£)
<b>TOTAL</b>	

Capital items – description	Capital items – cost (£)
<b>TOTAL</b>	

Other items – description	Other items – cost (£)
Monitoring and Evaluation	
Small Grants	
<b>TOTAL</b>	

## 9.2 Additional funds or in-kind contributions secured

Source of funding for project lifetime	Total (£)
CANARI CLME+ project (Co-Finance Confirmed Funding)	
CANARI (In-kind Confirmed Funding)	
CERMES (In-kind Confirmed Funding)	
Anguilla Fisherfolk Association (Unconfirmed Funding)	
Anguilla National Trust (Unconfirmed Funding)	
Department of Disaster Management, Anguilla (Unconfirmed Funding)	
Department of Fisheries and Marine Resources, Anguilla (Unconfirmed Funding)	
Fisheries and Ocean Governance Unit, Montserrat (Unconfirmed Funding)	
Montserrat Fishing and Boaters Association (Unconfirmed Funding)	
<b>TOTAL</b>	

Source of funding for additional work after project lifetime	Total (£)
<b>TOTAL</b>	

## 9.3 Value for Money

The most significant outlays of funding were for the participatory 3-D modelling, training workshops on climate communications, EAF and stewardship and small grant action projects with the fisherfolk that were considered highly effective and useful for knowledge mobilisation and capacity building of key stakeholders. These key activities were considered value for money.

Also, as a non-profit organisation, CANARI aims to conduct project management and implementation in the most cost effective and efficient manner. CANARI staff costs were based on the actual salaries of each individual involved in the project team. CERMES staff costs were based on rates CANARI applies to consultants but, as CANARI and CERMES have partnered on many projects, these rates are lower that it would receive elsewhere. Significant co-financing and in-kind contributions of staff time were also leveraged by CANARI and the project partners, including CERMES, DFMR in Anguilla and the Fisheries and Ocean Governance Unit in Montserrat. Cost efficiencies were also achieved by holding virtual Project Steering Committee meetings, providing mentoring virtually to the fisherfolk organisations to implement their small grant action projects and using in-country partners and mobilisers for logistics and stakeholder mobilisation for all workshops and other events in Anguilla and Montserrat.

However, a challenge remains the high cost of travel and shipping of equipment/materials to both UKOTs from other Caribbean countries, although they are not especially distant. This limited opportunities for UKOT stakeholders to attend regional trainings, meetings and peer exchanges and for CANARI and CERMES to facilitate in-country activities and lend expertise.

## Annex 1 Project’s full current logframe as presented in the application form (unless changes have been agreed)

Please insert your project’s logframe (if your project has a logframe), including indicators, means of verification and assumptions. N.B. if your application’s logframe is presented in a different format in your application, please transpose into the below template. Please feel free to contact [Darwin-Projects@ltsi.co.uk](mailto:Darwin-Projects@ltsi.co.uk) if you have any questions regarding this.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<b>Impact: Improved resilience and sustainability of fisheries, associated livelihoods and conservation of the marine environment in Anguilla and Montserrat</b>			
<b>Outcome:</b> Adaptation to climate change and variability mainstreamed into fisheries governance and management using an ecosystem approach to fisheries (EAF) in Anguilla and Montserrat	0.1 Adaptation to climate change and variability being mainstreamed into revised fisheries-related policies and plans in Anguilla and Montserrat by the end of the project.  0.2 Adaptive capacity of the fisheries sector strengthened for increased resilience to climate change of 50% fisherfolk in Anguilla and Montserrat by the end of the project.	0.1 Revised policies and plans for the fisheries sectors and/or related to fisheries of Anguilla and Montserrat. 0.2 Annual reports of the Ministries responsible for fisheries in Anguilla and Montserrat	(1) Fisheries authorities and related key government agencies continue to be supportive of mainstreaming CCA into fisheries using an EAF approach and fully engage in the project. (2) Key stakeholders in Anguilla and Montserrat from civil society and the private sector, and particularly fisherfolk, are committed to the process and fully engage in project activities. (3) Increased awareness and understanding can be turned into positive action for change in policy and practice of fisheries governance and management. (4) The timeframe of the project is sufficient to allow for policy change and implementation of practical CCA actions. (5) Large scale disasters, such as hurricanes, and political or socio-economic disruptions do not overly affect scheduling of project activities and the outputs and outcomes
<b>Outputs:</b> 1. Local and scientific knowledge combined to assess vulnerabilities and potential adaptation actions for the fisheries sectors of Anguilla and Montserrat, including priorities for institutional strengthening	1.1 Assessments of institutional readiness for CCA in fisheries in Anguilla and Montserrat conducted, using the ARIA toolkit, by the end of Year 1 1.2 Spatial vulnerability assessments of the fisheries sectors in Anguilla and Montserrat conducted, using P3DM, by the end of Year 1	1.1 Reports on institutional readiness for CCA in the fisheries sectors of Anguilla and Montserrat, with recommendations for strengthening and addressing gaps and conflicts in policies, legislation, structures, etc. 1.2 Physical models of Anguilla and Montserrat produced using P3DM	(1) Public sector agencies have the capacity to participate in assessments and can effectively manage other commitments. (2) Key written information will be readily accessible and stakeholders will be open to sharing information on the status of fisheries institutions to facilitate the assessment. (3) Incentive for local level engagement in adaptation effectively counters satisfaction with current coping strategies.

	1.3 Desk studies of vulnerabilities of the fisheries sectors in Anguilla and Montserrat conducted by the end of Year 1.	1.3 Report identifying vulnerabilities and adaptation measures for the fisheries sectors in Anguilla and Montserrat	<p>(4) Fisherfolk and residents in coastal communities fully engage in the assessments and are not distracted by other projects offering short term benefits.</p> <p>(5) The National Trusts or other leading CSO will be interested in co-facilitating the institutional assessments to ensure transparency and accountability of the process.</p> <p>(6) An appropriate venue and host for the model building and housing of the completed models in a publicly accessible space can be identified.</p>
2. Knowledge mobilisation and exchange to catalyse change in policy and practice for enhanced stewardship strengthened among key policy makers, resource managers and resource users in Anguilla and Montserrat based on assessed vulnerabilities and institutional readiness for CCA in fisheries.	<p>2.1 At least four communication products (e.g. posters, videos and written case studies) developed and disseminated by the end of Year 2.</p> <p>2.2 At least two knowledge mobilisation and exchange workshops/ meetings held in Anguilla and two held in Montserrat by the end of Year 2.</p> <p>2.3 At least fifty key policy makers, resource managers and resource users engaged in knowledge sharing and exchange processes by the end of Year 2.</p>	<p>2.1 Communication products.</p> <p>2.2 Dissemination strategies and records of dissemination for communication products.</p> <p>2.3 Reports from knowledge mobilisation and exchange for stewardship workshops/ meetings on assessed vulnerabilities and institutional readiness for CCA in fisheries in Anguilla and Montserrat.</p>	(1) Stakeholders willing to participate in knowledge mobilisation and exchange processes.
3. Actions taken to mainstream adaptation to climate change and variability in fisheries-related policies and plans of Anguilla and Montserrat, using EAF inter-sectoral approach.	<p>3.1 One capacity building workshop held in Anguilla and one held in Montserrat for the mainstreaming CCA in fisheries, using an EAF approach, by the end of Year 2.</p> <p>3.2 At least thirty key policy makers, resource managers and fisherfolk in Anguilla and Montserrat engaged in actions to mainstream CCA in</p>	<p>3.1 Reports of mainstreaming workshops in Anguilla and Montserrat for the integration of CCA in fisheries, using FAO EAF toolkit.</p> <p>3.2 Copies of revised fisheries-related policies and management plans for Anguilla and Montserrat, and/or documentation of recommendations for revisions.</p>	<p>(1) Policy makers are committed to addressing climate change impacts in the fisheries and related sectors.</p> <p>(2) Policy change can be effected within the timeframe of the project.</p>

	fisheries, using FAO EAF toolkit by Year 2. 3.3 At least one fisheries-related policy or plan of Anguilla and one of Montserrat being revised to mainstream CCA into fisheries by the end of the project.		
4. Capacity of fisherfolk and their organisations in coastal communities strengthened to undertake practical actions for ecosystem stewardship, incorporating CCA actions to improve livelihoods in Anguilla and Montserrat.	4.1 At least one capacity building workshop on ecosystem stewardship held in Anguilla and one in Montserrat targeting fisherfolk and their organisations and the fisheries extension officers that support them by the end of Year 2. 4.2 at least 30 fisherfolk and two fisherfolk organisations with strengthened capacity to undertake ecosystem stewardship, incorporating CCA actions to improve livelihoods by Year 2. 4.3 Four practical CCA actions to demonstrate ecosystem stewardship by fisherfolk and their organisations by identified by Year 2 and being implemented by Year 3.	4.1 Reports of capacity building workshops to develop practical CCA actions for ecosystem stewardship by fisherfolk and their organisations for Anguilla and Montserrat. 4.2 Reports on award and implementation of small grants to demonstrate ecosystem stewardship, incorporating CCA actions to improve livelihoods by fisherfolk and their organisations.	(1) Collaboration among different stakeholder groups to implement ecosystem stewardship actions is possible and potential conflicts can be managed. (2) Practical CCA actions that can be implemented by fisherfolk and their organisations within the project budget and timeframe can be identified.
<p><b>Activities:</b></p> <p><b>Output 1: Local and scientific knowledge combined to assess vulnerabilities and potential adaptation actions for the fisheries sectors of Anguilla and Montserrat, including priorities for institutional strengthening</b></p> <p>1.1 Conduct assessments of institutional readiness for climate change adaptation in the fisheries sectors in Anguilla and Montserrat, using the World Resource Institute's Adaptation Rapid Institutional Analysis (ARIA) toolkit. Prepare reports on findings and recommendations for changes in policies, legislation, structures, etc.</p> <p>1.2 Conduct vulnerability assessments of Anguilla and Montserrat using participatory three-dimensional modelling (P3DM), focusing collection of knowledge on areas critical for fishing (e.g. fishing communities, landing sites, fishing grounds, supporting ecosystems such as coral reefs and mangroves). Conduct desk research to capture additional knowledge on vulnerabilities and potential adaptation actions. Prepare summary reports on key findings and</p>			

recommendations with action plans for ecosystem stewardship, incorporating CCA actions for the fisheries sector and to improve livelihoods at the community level. Hold public events to present model and action plans to policy makers and other stakeholders.

**Output 2: Knowledge mobilisation and exchange to catalyse change in policy and practice for enhanced stewardship strengthened among key policy makers, resource managers and resource users in Anguilla and Montserrat based on assessed vulnerabilities and institutional readiness for CCA in fisheries**

2.1 Design and implement a communication strategy to increase knowledge mobilization and information exchange among policy makers, resource managers, fisherfolk in coastal communities and the public about assessed vulnerabilities and institutional readiness for CCA in the fisheries sectors of Anguilla and Montserrat.

2.2 Develop and disseminate awareness and advocacy products and hold other events (e.g. radio call in shows) on the need to mainstream CCA in fisheries-related policies and plans (using inter-sectoral EAF) of Anguilla and Montserrat to empower communities of practice, change agents, champions, etc. Products will be targeted to different audiences and will include printed and audiovisual materials. Pathways such as local media on Montserrat and Anguilla as well as social media will be used.

2.3 Develop and disseminate awareness and advocacy products and hold workshops/ meetings on the need to practice ecosystem stewardship, incorporating CCA actions to improve livelihoods, by fisherfolk and their organisations in Anguilla and Montserrat.

2.4 Peer exchanges will be facilitated between Anguilla and Montserrat, and with other Caribbean territories and island states, via: (1) sharing participatory videos and communication products produced by each territory at project workshops; (2) sharing recommendations for mainstreaming between policy makers in each territory; (3) providing the opportunity for either the DFRM or the Fisheries and Ocean Resources Unit to visit the other territory during the project used steering committee inception meeting; and (4) facilitating opportunities for the DFRM or the Fisheries and Ocean Resources Unit to participate in project workshops or processes in the other territory if feasible; facilitating peer sharing by fisherfolk from Anguilla and Montserrat with other fisherfolk from around the region using the established ICT systems (e.g. the CNFO fisherfolk yahoo group) and at regional events which CANARI and CERMES are engaged in; (5) encouraging presentation of results, lessons and recommendations at the OECS Council of Ministers of Environmental Sustainability meeting (Montserrat is a member and Anguilla is an associate member) and promoting synergies and sharing with the ongoing OECS Global Climate Change Alliance (GCCA) project; (6) encouraging sharing of experiences with countries participating in the Climate Change Adaptation in the Eastern Caribbean Fisheries Sector (CC4FISH) project; (7) submitting communication products to the regional database managed by the Caribbean Community Climate Change Centre (CCCCC) and promoting sharing of experiences of Anguilla and Montserrat in CCCCC initiatives.

**Output 3: Actions taken to mainstream adaptation to climate change and variability in fisheries-related policies and plans of Anguilla and Montserrat, using EAF inter-sectoral approach**

3.1 Facilitate and report on one capacity building workshop in each island for key policy makers, resource managers and resource users in Anguilla and Montserrat to mainstream CCA in fisheries using the FAO EAF toolbox.

3.2 Update at least one fisheries-related policy and plan in Anguilla and Montserrat to mainstream CCA in fisheries using EAF.

**Output 4: Capacity of fisherfolk and their organisations in coastal communities strengthened to undertake practical actions for ecosystem stewardship, incorporating CCA actions to improve livelihoods in Anguilla and Montserrat.**

4.1 Conduct one workshop in each island to strengthen the capacity of fisheries extension officers and fisherfolk to promote ecosystem stewardship to improve climate resilience and livelihoods in Anguilla and Montserrat. Workshops will conduct practical exercises to assist fisherfolk to develop practical action projects to demonstrate ecosystem stewardship to improve climate resilience and livelihoods.



4.2 Provide four small grants to fisherfolk organisations from Anguilla and Montserrat (two per island) to support a practical action project to demonstrate ecosystem stewardship to improve climate resilience and livelihoods in Anguilla and Montserrat, including technical assistance and coaching in project development, implementation, monitoring and reporting. Prepare a report presenting case studies of the projects and synthesising results, lessons and recommendations.

### Annex 3 Report of progress and achievements against final project logframe for the life of the project (if your project has a logframe)

Project summary	Measurable Indicators	Progress and Achievements for the life of the project
<p><b>Impact:</b></p> <p>Improved resilience and sustainability of fisheries, associated livelihoods and conservation of the marine environment in Anguilla and Montserrat</p>		<p>Conservation and sustainable use of fisheries and marine resources was enhanced in Anguilla and Montserrat by promoting ecosystem stewardship among fisherfolk and other coastal and marine resource users and an ecosystem approach to fisheries governance and management that integrates climate change adaptation, disaster risk management and sustainable management. This has helped build ecosystem and livelihood resilience.</p>
<p><b>Outcome:</b> Adaptation to climate change and variability mainstreamed into fisheries governance and management using an ecosystem approach to fisheries (EAF) in Anguilla and Montserrat</p>	<p>0.1 Adaptation to climate change and variability being mainstreamed into revised fisheries-related policies and plans in Anguilla and Montserrat by the end of the project.</p> <p>0.2 Adaptive capacity of the fisheries sector strengthened for increased resilience to climate change of 50% fisherfolk in Anguilla and Montserrat by the end of the project.</p>	<p>In terms of achieving the project outcome, a draft Small Coastal Pelagics Fisheries Management Plan for Anguilla and an updated draft Fisheries Plan for Montserrat were developed to support mainstreaming of climate change adaptation and disaster risk management considerations using EAF (see Annex 6-12 for the plans). Capacity and actions to adapt have also been enhanced among fisherfolk and other coastal and marine resource managers and users to undertake vulnerability assessments, communicate about climate change and potential adaptation options, and plan and implement practical actions to adapt and promote ecosystem stewardship in the fisheries sector. 45 fishers in Anguilla and 36 in Montserrat had their capacity built representing approximately 49% and 36% of registered fishers in each UKOT respectively (see Annex 6-7 and 6-10 for capacity building workshop reports and Annex 6-14 for summary reports of practical action projects by the fisherfolk).</p>
<p><b>Output 1.</b> Local and scientific knowledge combined to assess vulnerabilities and potential adaptation actions for the fisheries sectors of Anguilla and Montserrat, including priorities for institutional strengthening</p>	<p>1.1. Assessments of institutional readiness for CCA in fisheries in Anguilla and Montserrat conducted, using the ARIA toolkit, by the end of Year 1</p> <p>1.2 Spatial vulnerability assessments of the fisheries sectors in Anguilla and Montserrat conducted, using P3DM, by the end of Year 1</p> <p>1.3 Desk studies of vulnerabilities of the fisheries sectors in Anguilla and Montserrat carried out by the end of Year 1</p>	<p>In terms of 1.1 – 1.3, the assessments of institutional readiness for CCA and the spatial vulnerability assessments of the fisheries sectors in Anguilla and Montserrat were completed within Year 1, including desk studies and in-country workshops. The final summary report was reviewed and approved by stakeholders, and disseminated in Anguilla, Montserrat and regionally in Year 2. The final report is provided as means of verification as Annex 6-3.</p>

Project summary	Measurable Indicators	Progress and Achievements for the life of the project
Activity 1.1. Conduct assessments of institutional readiness for climate change adaptation in the fisheries sectors in Anguilla and Montserrat using the World Resource Institute's Adaptation Rapid Institutional Analysis (ARIA) toolkit, and prepare reports on findings and recommendations for institutional strengthening		Institutional readiness assessments completed for Anguilla and Montserrat, including a desk review and in-country focus groups with key institutional actors. Summary report developed and disseminated with findings and recommendations for institutional strengthening, including changes in policies, laws, structures, etc.
Activity 1.2. Conduct vulnerability assessments of Anguilla and Montserrat using participatory 3-D modelling, focusing collection of knowledge on areas critical for fishing, and hold public events to present model and priorities for adaptation based on assessment to policy makers and other stakeholders. Prepare summary reports on key findings and recommendations for adaptation and stewardship.		3-D models of the entire islands of Anguilla and Montserrat were built to assess vulnerability from "ridge to reef", focusing on areas critical to the fisheries sector (e.g. fishing communities, landing sites, fishing grounds and supporting ecosystems such as coral reefs and mangroves). A wide range of stakeholders were actively engaged to assess key vulnerabilities and priorities for adaptation, including fisherfolk, community residents, dive and tour operators and government agencies. The completed models were presented to policymakers and other key stakeholders in public handover ceremonies and publicly displayed to support further awareness raising. As the 3-D models were built to scale and georeferenced, they were digitised to produce GIS datasets and maps to support future spatial planning.
<b>Output 2.</b> Knowledge mobilisation and exchange to catalyse change in policy and practice for enhanced stewardship strengthened among key policy makers, resource managers and resource users in Anguilla and Montserrat based on assessed vulnerabilities and institutional readiness for CCA in fisheries	<p>2.1 At least four communication products (e.g. posters, videos and written case studies) developed and disseminated by the end of Year 2.</p> <p>2.2 At least two knowledge mobilisation and exchange workshops/ meetings held in Anguilla and two held in Montserrat by the end of Year 2.</p> <p>2.3 At least fifty key policy makers, resource managers and resource users engaged in knowledge sharing and exchange processes by the end of Year 2.</p>	In terms of 2.1-2.3, seven communication products have been developed and disseminated, including two posters, two videos, a summary for policymakers, an issue paper and a GIS story map. Two workshops have been held in Anguilla and Montserrat targeting 34 and 37 resource managers and users respectively, to build stakeholders' capacity for climate communications and raise awareness of climate change impacts and adaptation priorities and advocate for changes in policy and practice in Anguilla's and Montserrat's fisheries sectors. A fisheries learning exchange was also held in Saint Lucia to expose fisheries officers and fisherfolk leaders from Anguilla and Montserrat to innovations and experiences in adapting in the fisheries sector at the national and local levels and enhancing livelihood opportunities and stewardship, using EAF. Copies of the communication products and reports of workshops and learning exchange have been provided as means of verification in Annexes 6-5, 6-6, 6-7, 6-8 and 6-9.
Activity 2.1. Design and implement a communication strategy to increase knowledge mobilisation and information exchange among policy makers, resource managers, fisherfolk, coastal communities and the public		A project communications and stakeholder engagement strategy was developed in Year 1 to guide project visibility and awareness raising and knowledge exchange among key stakeholders in Anguilla, Montserrat and wider region (see Annex 6-4).
Activity 2.2. Develop and disseminate awareness and advocacy products and hold other events on the need to mainstream climate change adaptation in fisheries-related policies and plans and apply EAF		Awareness and advocacy products were developed, including two posters summarising findings of vulnerability assessments, a summary for policymakers on the institutional readiness assessments and priorities for strengthening, two participatory videos on local climate change impacts and priorities for action among fisherfolk, a GIS story map summarising project results, lessons and recommendations and an issue paper identifying key gaps and actions needed drawing on lessons from this project and related initiatives across the Caribbean.

Project summary	Measurable Indicators	Progress and Achievements for the life of the project
		<p>These products were developed in collaboration with the project partners, fisherfolk and other coastal and marine resource users. These products enabled knowledge exchange and advocacy on need to mainstream adaptation and build resilience within the fisheries sectors in Anguilla and Montserrat and the wider Caribbean.</p>
<p>Activity 2.3. Develop and disseminate awareness and advocacy products and hold other events on the need to practice ecosystem stewardship</p>		<p>The fisheries learning exchange in Saint Lucia in April 2018 exposed fisheries officers and fisherfolk leaders from Anguilla and Montserrat to experiences and lessons in climate change adaptation and ecosystem stewardship in the fisheries sector, including hands-on demonstrations and an in-water visit to a coral reef nursery in the Soufriere Marine Management Area. Field visits were organised as part of the EAF Training and Stewardship workshops in Anguilla and Montserrat in January 2019 to facilitate hands-on learning and peer exchange among fisherfolk, dive and tour operators, and coastal and marine resource managers focused on raising awareness about ecosystem stewardship and its value in building resilience in the fisheries sector. The summary reports of the small grant projects (see output 4) and the GIS story map summarising project results and lessons also helped document and share fisherfolk's stewardship actions in Anguilla and Montserrat.</p>
<p>Activity 2.4. Peer exchanges will be facilitated between Anguilla and Montserrat, and with other Caribbean territories and island states</p>		<p>Fisheries learning exchanges was held as part of the project inception workshop in Montserrat and in Saint Lucia to expose fisheries officers and fisherfolk leaders from Anguilla and Montserrat to innovations and experiences in adapting in the fisheries sector at the national and local levels and enhancing livelihood opportunities and stewardship, using EAF. CANARI and other partners also attended two regional conferences, including the 71<sup>st</sup> Gulf and Caribbean Fisheries Institute Annual Conference in 2018 and UNESCO Caribbean Regional Workshop - <i>Mobilizing Indigenous and Local Knowledge Solutions: Addressing Climate Impacts and Vulnerabilities</i> in 2019, and two regional meetings, including the 5<sup>th</sup> OECS Meeting of the Council of Ministers of Environmental Sustainability (COMES 5) in 2018 and 6<sup>th</sup> OECS Meeting of Council of Ministers of Environmental Sustainability (COMES 6) in 2019. Experiences and lessons were also shared via meetings and via awareness products with the 7 OECS countries participating in the CC4FISH project and with other regional initiatives by the Caribbean Community Climate Change Centre (CCCCC) and UN agencies.</p>
<p><b>Output 3.</b> Actions taken to mainstream adaptation to climate change and variability in fisheries-related policies and plans of Anguilla and Montserrat, using EAF inter-sectoral approach.</p>	<p>3.1 One capacity building workshop held in Anguilla and one held in Montserrat for the mainstreaming CCA in fisheries, using an EAF approach, by the end of Year 2.</p>	<p>In terms of 3.1-3.2, one combined capacity building workshop on mainstreaming climate change adaptation and promoting ecosystem stewardship in the fisheries sector was held in Anguilla and one in Montserrat. These helped build the knowledge and skills of over 75 policy makers, resource managers and users, including fisherfolk, to mainstream adaptation and disaster risk management into</p>

Project summary	Measurable Indicators	Progress and Achievements for the life of the project
	<p>3.2 At least thirty key policy makers, resource managers and fisherfolk in Anguilla and Montserrat engaged in actions to mainstream CCA in fisheries, using FAO EAF toolkit by Year 2.</p> <p>3.3 At least one fisheries-related policy or plan of Anguilla and one of Montserrat being revised to mainstream CCA into fisheries by the end of the project.</p>	<p>fisheries-related policies and plans using EAF. Copies of the workshop reports are provided in Annex 6-10.</p> <p>In terms of 3.3, Anguilla's draft Small Coastal Pelagics Fisheries Management Plan was developed and Montserrat's draft National Fisheries Plan updated, integrating adaptation and disaster risk management using EAF. Copies of the draft plans are provided in Annex 6-12.</p> <p>CANARI also sought to mainstream ecosystem-based solutions to climate change, including EAF, into regional plans for the OECS (Montserrat is a member and Anguilla is an associate member). This included inputs into Paper No. OECS/COMES/18/05/08 "Ecosystem-Based Approaches to Risk Reduction in Communities" and subsequent recommendations for the OECS Council of Ministers for Environment and Sustainability.</p>
<p>Activity 3.1. Facilitate and report on one capacity building workshop each in Anguilla and Montserrat for key policy makers and resource managers and users to mainstream adaptation in fisheries management using FAO's EAF toolbox.</p>		<p>One combined capacity building workshop on mainstreaming climate change adaptation and promoting ecosystem stewardship in the fisheries sector was held in Anguilla and one in Montserrat at end of Year 2. These workshops provided an opportunity to apply EAF to support identifying and implementing steps to update fisheries-related policies and plans with a focus on a Coastal Pelagics Fisheries Management Plan in Anguilla and the National Fisheries Plan in Montserrat.</p>
<p>Activity 3.2. Update at least one fisheries-related policy and plan in Anguilla and Montserrat to mainstream climate change adaptation using EAF.</p>		<p>A draft Small Coastal Pelagics Fisheries Management Plan was developed for Anguilla and draft National Fisheries Plan updated for Montserrat, integrating adaptation and disaster risk management using EAF.</p>
<p><b>Output 4.</b> Capacity of fisherfolk and their organisations in coastal communities strengthened to undertake practical actions for ecosystem stewardship, incorporating CCA actions to improve livelihoods in Anguilla and Montserrat.</p>	<p>4.1 At least one capacity building workshop on ecosystem stewardship held in Anguilla and one in Montserrat targeting fisherfolk and their organisations and the fisheries extension officers that support them by the end of Year 2.</p> <p>4.2 at least 30 fisherfolk and two fisherfolk organisations with strengthened capacity to undertake ecosystem stewardship, incorporating CCA actions to improve livelihoods by Year 2.</p>	<p>In terms of 4.1-4.2, one combined capacity building workshop on mainstreaming climate change adaptation and promoting ecosystem stewardship in the fisheries sector was held in Anguilla and one in Montserrat. These workshops engaged 20 fishers and fish processors/vendors and the two national fisherfolk organisations in each UKOT to take ownership and better manage local fisheries and marine resources to ensure their conservation and sustainable use by the end of Year 2. Copies of the workshop reports provided as means of verification in Annex 6-10.</p> <p>In terms of 4.3, a small grant facility of £ was launched at the end of Year 2 to support practical actions for adaptation and ecosystem stewardship by Anguilla's and Montserrat's fisherfolk organisations. Two small grant projects were designed and implemented, one jointly by two national fisherfolk organisations in Anguilla and one jointly by two national fisherfolk organisations in Montserrat. Each project was supported by a small grant of £, and successfully implemented over 6months in</p>

Project summary	Measurable Indicators	Progress and Achievements for the life of the project
	4.3 Four practical CCA actions to demonstrate ecosystem stewardship by fisherfolk and their organisations (2 per territory) identified by Year 2 and being implemented by Year 3.	Year 3 with about 20-30 fisherfolk in each UKOT. Copies of the small grant proposals, final grant reports and summary case studies highlighting key results and lessons are provided in Annexes 6-13 and 6-14.
Activity 4.1. Conduct one workshop in each island to strengthen the capacity of fisheries extension officers and fisherfolk to promote ecosystem stewardship to improve climate resilience and livelihoods in Anguilla and Montserrat.		One combined capacity building workshop on mainstreaming climate change adaptation and promoting ecosystem stewardship in the fisheries sector was held in Anguilla and one in Montserrat at end of Year 2. This included a focus on ecosystem stewardship, highlighting the importance of fisherfolk and their dependents taking greater ownership for the conservation and sustainable use of fisheries and marine resources that are the basis of their livelihoods, and included field visits in each UKOT demonstrating stewardship.
Activity 4.2. Provide four small grants to fisherfolk organisations from Anguilla and Montserrat (two per island) to support a practical action project to demonstrate ecosystem stewardship to improve climate resilience and livelihoods in Anguilla and Montserrat, including technical assistance and coaching in project development, implementation, monitoring and reporting. Prepare a report presenting case studies of the projects and synthesising results and lessons.		Two small grants were awarded (one per island) to fisherfolk organisations in Anguilla and Montserrat. A joint project was developed and implemented by the Anguilla Fisherfolk Association and Anguilla Fishing Cooperative with a small grant of £ to address safety at sea concerns and promote stewardship among Anguillan fisherfolk to build climate resilience. This included helping restore coastal and marine habitats in Anguilla's Prickly Pear Marine Protected Area by constructing and deploying over 100 lobster traps to create a habitat for the Caribbean spiny lobster and collecting bluestone to create an artificial reef. A joint project was also developed and implemented by the Montserrat Fishing and Boaters Association and Montserrat Fisherman's Cooperative with a small grant of £ to promote climate-smart practices and stewardship among Montserrat fisherfolk. This included a 'fishers against marine litter' campaign with a 2-day beach clean-up at Margarita Bay, Montserrat. A summary case study including key results and lessons from each of the small grant projects was developed (see Annex 6-14). CANARI also provided coaching and mentoring to support project development, management, monitoring and evaluation and reporting (see Annex 6-15 for the mentoring reports).

## Annex 4 Standard Measures

Code	Description	Totals (plus additional detail as required)
<b>Training Measures</b>		
1	Number of (i) students from the UKOTs; and (ii) other students to receive training (including PhD, masters and other training and receiving a qualification or certificate)	
2	Number of (i) people in UKOTs; and (ii) other people receiving other forms of long-term (>1yr) training not leading to formal qualification	
3a	Number of (i) people in UKOTs; and (ii) other people receiving other forms of short-term education/training (i.e. not categories 1-5 above)	(i) Total of 219 persons. 118 persons in Anguilla and 101 persons in Montserrat. (ii) N/A.
3b	Number of training weeks (i) in UKOTs; (ii) outside UKOTs not leading to formal qualification	(i) Total of 7.5 weeks. 4 weeks in Anguilla and 3.5 weeks in Montserrat. This includes training in vulnerability assessments and participatory 3-D modelling, climate communications, participatory video and the ecosystem approach to fisheries (EAF) and stewardship (ii) N/A
4	Number of types of training materials produced. Were these materials made available for use by UKOTs?	1 training module based on FAO EAF Toolbox. This toolbox was disseminated in Anguilla and Montserrat.  1 video to support other fishers in modifying fish traps to address 'ghost fishing' developed by Montserrat Fishing and Boaters Association
5	Number of UKOT citizens who have increased capacity to manage natural resources as a result of the project	219 persons have been formally documented as receiving training and other capacity building activities, and having increased capacity to adapt and sustainable manage fisheries and marine resources in Anguilla and Montserrat.
<b>Research Measures</b>		
9	Number of species/habitat management plans/strategies (or action plans) produced for/by	Two fisheries management plans. A draft Coastal Pelagics Management Plan (2020-2023)

<b>Code</b>	<b>Description</b>	<b>Totals (plus additional detail as required)</b>
	Governments, public authorities or other implementing agencies in the UKOTs	for Anguilla and a draft Fisheries, Aquaculture and Ocean Resources Plan for Montserrat (2020-2025).
10	Number of formal documents produced to assist work in UKOTs related to species identification, classification and recording.	
11a	Number of papers published or accepted for publication in peer reviewed journals written by (i) UKOT authors; and (ii) other authors	
11b	Number of papers published or accepted for publication elsewhere written by (i) UKOT authors; and (ii) other authors	(i) N/A (ii) One summary for policymakers and one issue paper published by CANARI, which is based in Trinidad and Tobago
12b	Number of computer-based databases enhanced (containing species/genetic information). Were these databases made available for use by UKOTs?	2 GIS databases enhanced, one each for Anguilla and Montserrat, based on data collected on fisheries and marine resources from the participatory 3-D modelling exercises in both UKOTs.
13a	Number of species reference collections established. Were these collections handed over to UKOTs?	
13b	Number of species reference collections enhanced. Were these collections handed over to UKOTs?	
<b>Dissemination Measures</b>		
14a	Number of conferences/seminars/workshops/stakeholder meetings organised to present/disseminate findings from UKOT's Darwin project work	Six workshops and four fisherfolk meetings in total. Three workshops and three fisherfolk meetings in Anguilla (including on findings from vulnerability assessments, participatory videos and safety at sea workshop for Anguillan fishers). Three workshops and one fisherfolk meeting in Montserrat (including on findings from vulnerability assessments, participatory videos and lessons learned from project).
14b	Number of conferences/seminars/workshops/stakeholder meetings attended at which findings from the Darwin Plus project work will be presented/ disseminated	Four regional conferences and meetings were attended by CANARI staff where findings were presented. This included: 71 <sup>st</sup> Gulf and Caribbean Fisheries Institute (GCFI) Annual



Code	Description	Totals (plus additional detail as required)
		<p>Conference from November 5-9, 2018 in Colombia.</p> <p>The UNESCO Caribbean Regional Workshop - <i>Mobilizing Indigenous and Local Knowledge Solutions: Addressing Climate Impacts and Vulnerabilities</i> from September 3-5, 2019 in Guyana.</p> <p>5<sup>th</sup> OECS Meeting of the Council of Ministers of Environmental Sustainability (COMES 5) in Montserrat from July 9-11, 2018 and 6<sup>th</sup> OECS Meeting of Council of Ministers of Environmental Sustainability (COMES 6) in Martinique from May 17-19, 2019.</p>
<b>Physical Measures</b>		
20	Estimated value (£s) of physical assets handed over to UKOT(s)	Two physical 3-D models valued at £ total. This included a 3-D model of the entire island of Anguilla and a 3-D model of entire island of Montserrat based on participatory 3-D modelling.
21	Number of permanent educational/training/research facilities or organisation established in UKOTs	
22	Number of permanent field plots established in UKOTs	
23	Value of resources raised from other sources (e.g., in addition to Darwin funding) for project work	£

## Annex 5 Publications

Type * (e.g. journals, manual, CDs)	Detail (title, author, year)	Nationality of lead author	Nationality of institution of lead author	Gender of lead author	Publishers (name, city)	Available from (e.g. weblink, contact address, annex etc)
Technical report	Institutional assessments of climate change adaptation readiness in the Anguilla and Montserrat fisheries sectors. Fardin, F., Andrews, M. and Phillips, T. 2018.	Martinique	Trinidad and Tobago	Female	CANARI, Port of Spain	<a href="https://canari.org/wp-content/uploads/2018/10/institutional-assessment-for-anguilla-montserrat-fisheries-sep2018.pdf">https://canari.org/wp-content/uploads/2018/10/institutional-assessment-for-anguilla-montserrat-fisheries-sep2018.pdf</a>
Technical report	Assessment of vulnerability to climate change in the Anguilla and Montserrat fisheries sectors. Granderson, A., Ramkissoon, C., Jehu, A. and Phillips, T. 2018.	Trinidad and Tobago	Trinidad and Tobago	Female	CANARI, Port of Spain	<a href="https://canari.org/wp-content/uploads/2018/10/vulnerability-assessment-of-anguilla-montserrat-fisheries-sep2018.pdf">https://canari.org/wp-content/uploads/2018/10/vulnerability-assessment-of-anguilla-montserrat-fisheries-sep2018.pdf</a>
Summary for policymakers	Are we ready to adapt to climate change? An institutional assessment of	Trinidad and Tobago	Trinidad and Tobago	Female	CANARI, Port of Spain	<a href="https://canari.org/wp-content/uploads/2018/09/CANARI-Brief_Readiness-to-Adapt-in-Anguilla-Montserrat-Fisheries_June-2019.pdf">https://canari.org/wp-content/uploads/2018/09/CANARI-Brief_Readiness-to-Adapt-in-Anguilla-Montserrat-Fisheries_June-2019.pdf</a>

	the fisheries sectors in Anguilla and Montserrat, Andrews, M. and Granderson, A.					
Video	Anguilla's Fishing Dilemma, 2019	Anguilla	Anguilla	Male	CANARI, Port of Spain	<a href="https://www.youtube.com/watch?v=lerKOUQP5o&amp;t=1s">https://www.youtube.com/watch?v=lerKOUQP5o&amp;t=1s</a>
Video	Our Changing Fisheries: Voices from Montserrat, 2019	Montserrat	Montserrat	Male	CANARI, Port of Spain	<a href="https://www.youtube.com/watch?v=sHbVbjlWI_8&amp;feature=youtu.be">https://www.youtube.com/watch?v=sHbVbjlWI_8&amp;feature=youtu.be</a>
Case study/ PowerPoint slides	Report of the small grant project: Increasing safety at sea and stewardship among Anguillan fisherfolk to build climate resilience, Andrews, M. and Granderson, A.	Trinidad and Tobago	Trinidad and Tobago	Female	CANARI, Port of Spain	<a href="https://canari.org/wp-content/uploads/2018/09/Darwin-Anguilla-Small-Grant-Project-Report-31.3.2020.pdf">https://canari.org/wp-content/uploads/2018/09/Darwin-Anguilla-Small-Grant-Project-Report-31.3.2020.pdf</a>
Case study/ PowerPoint slides	Report on the small grant project: Building resilience to climate change in Montserrat's fisheries	Trinidad and Tobago	Trinidad and Tobago	Female	CANARI, Port of Spain	<a href="https://canari.org/wp-content/uploads/2018/09/Darwin-Montserrat-Small-Grant-Project-Report-31.3.2020-1.pdf">https://canari.org/wp-content/uploads/2018/09/Darwin-Montserrat-Small-Grant-Project-Report-31.3.2020-1.pdf</a>

	through climate-smart practices and stewardship, Ramlogan, N. and Granderson, A.					
GIS story map	Towards climate resilient fisheries: Mainstreaming climate change adaptation in the fisheries of Anguilla and Montserrat, Ramkissoon, C. and Granderson, A.	Trinidad and Tobago	Trinidad and Tobago	Female	CANARI, Port of Spain	<a href="https://arcg.is/LWOfy">https://arcg.is/LWOfy</a>
Issue Paper	Rising to the climate challenge: Coastal and marine resilience in the Caribbean, Granderson, A., Andrews, M., Albert, D. and Leotaud, N. 2020.	Trinidad and Tobago	Trinidad and Tobago	Female	CANARI, Port of Spain	<a href="https://canari.org/wp-content/uploads/2020/06/coastal-and-marine-resilience-in-the-Caribbean.pdf">https://canari.org/wp-content/uploads/2020/06/coastal-and-marine-resilience-in-the-Caribbean.pdf</a>

## Annex 6 Darwin Contacts

<b>Ref No</b>	DPLUS066
<b>Project Title</b>	Climate Change Adaptation in the Fisheries of Anguilla and Montserrat
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## Checklist for submission

	Check
<b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> putting the project number in the Subject line.	Yes
<b>Is your report more than 10MB?</b> If so, please discuss with <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> about the best way to deliver the report, putting the project number in the Subject line.	No
<b>Have you included means of verification?</b> You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes*
<b>Do you have hard copies of material you want to submit with the report?</b> If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes**
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	