





Darwin Initiative Main Project Annual Report

Important note: To be completed with reference to the Reporting Guidance Notes for Project Leaders:

it is expected that this report will be no more than 10 pages in length, excluding annexes

Submission Deadline: 30th April 2017

Darwin Project information

Project reference	23-028
Project title	Coastal Communities for integrated seascape management in Atlantida Honduras.
Host country/ies	Honduras.
Contract holder institution	Fauna & Flora International
Partner institution(s)	LARECOTURH, Centre for Marine Studies (CEM), Cayos Cochinos Foundation (FCC), Bay Islands Foundation (FIB) and Cuero-y-Salado Foundation (FUCSA)
Darwin grant value	£306,552
Start/end dates of project	1 st April 2016 - 31 st March 2019
Reporting period (e.g., Apr 2016 – Mar 2017) and number (e.g., Annual Report 1, 2, 3)	Apr 2016 – Mar 2017 Annual Report 1
Project Leader name	Robert Bensted-Smith
Project website/blog/Twitter	
Report author(s) and date	Julio Bernal and Vance Russell (FFI) with contribution from Icauri Ramos and Gerardo Yanes (RECOTURH), Ana Paz (FUCSA), Jorge Anariba (CEM), Marcio Aronne (FCC) and Diego Lanza (FIB)

1. Project rationale

The seascape encompassing CSWR Cuero y Salado Wildlife Reserve), BIMNP (Bay Islands Marine National Park) and CCMNM (Cayos Cochinos Marine National Monument) contains inter-connected estuary, lagoon, mangrove, seagrass and coral reef habitat, and has high species diversity, including Hawksbill turtle (CR), Utila spiny-tailed iguana (CR) and Antillean manatee (VU). The Mesoamerican Reef system is globally important, yet Honduras, ranking 129 on the HDI, features in only 5 Darwin projects.

Yet despite this richness, the region's rich biodiversity is threatened. Fisheries have declined due to degradation of mangroves (cutting, livestock grazing, invasive oil palm) and estuaries (sediment, pollution), harmful fishing practices (fine-mesh nets, bottom trawling) and over-fishing (low compliance, weak enforcement). Coastal problems impact juveniles of reef species, such as commercially important yellowtail snapper. Thus, depleted fish populations, sediment, pollution and consequent macro-algal growth negatively impact coral reefs offshore and ultimately the biodiversity, productivity and climate-resilience of the ecosystem.

An underlying problem is weak organisation and capacity of local groups, especially those who depend on subsistence fisheries. Many of these communities have low incomes, limited education or face gender discrimination. Communities share fisheries and depend on each other's custodianship of critical habitat, yet there is minimal dialogue between them. Lack of inter-community cooperation engenders conflict around fishing practices and access rights, weakens their collective voice in marine management decisions or negotiations, e.g., with fish wholesalers or tourism businesses, and undermines resilience. Many coastal villagers remain marginalised and endure severe poverty, despite the region's important tourism industry. At the protected area level, each MPA has a dedicated co-manager and has received some support for management and research, but often work in isolation.

This web of problems demands an integrated solution from socioeconomic and ecological spheres. FFI, LARECOTURH and partners have previously (19-017) strengthened the CSWR fishing cooperative and participatory governance system; this approach needs to be extended seascape-wide with approaches to conserve species and their habitats. Integrated seascape management requires pooling scientific and hitherto undervalued traditional knowledge and augmenting understanding of connectivity. Lastly, enforcement must be strengthened.

Comunidades Costeras y Zona de Propuesta Leyenda COMUNIDADES COSTERAS 1.- La Rosita 2.- Barra Cuero Mar CARIBE ISLAS de la BAHIA 3.- Salado Barra 4.- Orotina 5.- El Porvenir rque Nacional Marini 6.- Bonitillo Islas de la Bahir 7.- Dantillo 1750000 8.- Corozal 9.- Sambo Creek 10.- El Cacao 11.- Nueva Armenia 12,- Lis Lis 13.- Rio Esteban 780000 14.- Rio Coco CUERO y SALADO CAYOS COCHINOS 15.- EastEnd 16.- Chachahuate 17.- Cayos Utila Parque Nacional NOMBRE de Elaborado por: LARECOTURH - FFI DIOS La Ceiba Octubre 2015 SINIT Honduras Referencia Espacial Escala WGS 84 1:600,000

2. Project partnerships

FFI is the lead institution for the project and coordinates the Steering Committee Group formed at the start of the project with the other project partners: LARECOTURH, FUCSA, FCC, FIB, and CEM. FFI steers the project to keep it on the track set out in the log frame, while accommodating partner *modus operandi* and each partner site's own particular context and challenges.

Briefly, the three local partners (FUCSA, FIB, and FCC) are MPA co-managers at three separate MPA sites in the department of Atlántida, Honduras, whereas the remaining two partners work across the seascape on specific issues. LARECOTHUR is an influential network focusing and leading on coastal community organisation and marine livelihood development, and CEM focuses on using science to protect marine ecosystems.

For the 2016/17 Financial Year, the partnership between FFI and the five local partners has been positive with each partner being very pro-active in carrying out their roles/responsibilities. FFI has been able to oversee implementation through communication by e-mail, phone, text message, Skype/Whatsapp calls and face-to-face meetings and field visits. The technical and mentoring support provided by FFI to relevant partners has largely been on schedule.

From an inter-institutional perspective, the Darwin project has strengthened and consolidated partner alliances/relationships, notwithstanding that some of the partners previously worked together. In fact, some very tangible achievements/results are due specifically to effective collaboration between the partners, such as: Outcome 2, Activity 2.1 "Collaborate with the Naval Force to conduct a pilot model of

marine protection in their training programs."; Outcome 3, activity 3.1 "Collect and study existing data on ecological connectivity between components of the seascape"; and Outcome 5, activity 5.2 "Complete registration by the co-managers of associated fishers of each protected area (for access rights purposes). Partners have also come together for dialogue through the establishment of a steering committee, made up of directors from each organization, to oversee project implementation and make tactical and strategic decisions, adapting implementation when necessary. The steering committee has communicated on a quarterly basis to discuss work plans, progress, delays and obstacles, together with ideas on how to address certain issues of interest within the project. The steering committee interacted with staff from the different organisations according to the themes addressed in their agendas.

Regardless of the positive partnerships and overall project progress, some challenges in implementation were encountered by the steering committee: a) Difficulties in agreeing on specific dates for coordinated inputs from partners; b) Need for more in-depth group discussion and agreement on some of the key activities and topics for the project; and c) Information exchange between partners, whilst permitting dialogue.

In order to address these challenges and improve work with the partners, during Yr2, FFI will (i) increase the frequency of steering committee meetings, (ii) improve the planning process for Yr2, detailing responsibilities, implementation time and dependencies, and (iii) provide extra support to partners in the use of Basecamp so exchange of information and discussion/interaction amongst the partners is improved.

3. Project progress

3.1 Progress in carrying out project Activities

With many activities under way in the manner and time planned, most project activities began with a dynamic start and in accordance with the stated project schedule. Actions included signing agreements with each of the five partner NGOs as well as an initial week-long launch workshop to flesh out the project plans, discuss key issues, and specify methods for measuring each indicator. In addition to the start-up workshop, the project team held a workshop to present the project to local authorities and partners held a number of meetings in participating communities. During this time, partners determined baseline measurements for the planned Year 1 (Yr1) indicators.

In general, there is room to strengthen coordination and collaboration in some project aspects. There will be a major effort led by FFI in the coming quarter to improve communications and clarify leadership for activities and the project's roundtable. During this time, FFI will ensure that any activities not yet completed as planned (indicated in this report) are caught up and all tasks are on track. More detailed descriptions of the progress of activities under the outputs are described below.

Output 1 Activities

Activities scheduled under year one of the project included 1.2, 1.3, 1.7, 1.8 and 1.9. Under 1.2, partners established 2 mangrove tree nurseries with capacity of 9,000 plants each. They also restored 1 hectare of mangroves at Laguna del Cacao and are continuing to restore priority areas in the coming year. Partners completed a simple monitoring protocol for mangrove restoration and mangrove stress using the CARICOMP methodology. Two permanent mangrove monitoring plots within Cuero-y-Salado Wildlife Reserve (CSWR) and at Utila (Bay Islands National Park) were established. In the same locations, the drivers causing mangrove loss were identified and the strategy to reduce them is under development.

CEM shared the seascape trawler assessment with MPA managers. Once validated it will be presented to the Stakeholder Forum in Yr2. Utilizing past studies on yellowtail snapper ecology, CEM completed a synthesis document (1.7) including the most the most essential information related to the yellowtail fishery. CEM plans to present the results to the Stakeholder Forum in Yr2 to improve management of the fishery.

Partners originally planned discussions in the Stakeholder Forum for conservation and protection of marine turtles, manatee, and iguana (1.8). Since the forum was established March 2017, discussion happened between partners in a series of meetings. Informative banners in Spanish and English were produced to increase awareness for the conservation of mangroves and Utila Iguana. They were used extensively in community meetings and environmental education activities with children. The community

manatee monitoring methodology was updated and in Yr2 aquatic vegetation plots will be established. In addition to monitoring a total of 62 nocturnal and 25 daytime patrols in nesting beaches by 45 volunteer Conservation Guides were carried out led by FCC. Partners led and celebrated the Gararu festival with local communities to further increase environmental awareness of the protected areas and threatened species. Approximately 80 community members participated.

Under activity 1.9 were two planning sessions with the national GEF coastal and marine project, aimed at agreeing on cooperation and co-financing of specific activities. While these confirmed the alignment of interests and intention to cooperate, the GEF project leader proved reluctant to confirm specific funding commitments, perhaps because of their decision-making process. The project partners met the project goal of 3 proposals for funding, submitting a total of three. We expect there will be subsequent proposals in Yr2.

Output 2 Activities

Activities planned around collaboration with the Navy were successfully carried out. CEM developed a capacity-building plan with the objective of strengthening the Honduran Navy's capacity to protect marine resources from both ecological and economic perspectives. Co-managers of the reserves reviewed the plan and provided input on successful surveillance already employed. As a next step, CEM is organizing a meeting with leadership of the Navy in Tegucigalpa to discuss how to best incorporate the plan into the curriculum of the country's naval academy.

For sharing information about fisheries under 2.2: 1) The Fishers Registry System, managed by CEM is in the process of upgrade to produce monthly reports that will be distributed to local stakeholders; 2) Fisheries information has been collected using OurFish and a portal to visualise information collected has been developed. In Yr2 a standardised report will be produced so it can be also be distributed on a regular basis; and 3) Implementation of the SMART tool is being tested by FCC and soon will be implemented by FUCSA. No decision has been taken for sharing touristic information. The topic will be discussed in Yr2 with the input from the Stakeholders Forum and project partners. FUCSA and the Fishermen's Association of La Rosita in CSWR coordinated on various patrol and information sharing to decommission illegal fishing gear including harpoons, diving tanks and 3 boats.

After a long search, the Smithsonian Institution put together a document summarising the most suitable companies that could provide artisanal vessel tracking systems (2.3). Discussions are underway to select the best system. CEM will continue participating on discussion and determination of best system and once selected, will participate in the pilot, roll-out of the same.

FCC shared its experience of preferential access with project partners. Managed Access led a workshop on access rights to partners in Honduras. In CSWR it is not possible to implement such a scheme before the boundaries are approved by the Government. A discussion is ongoing amongst the actors.

The monitoring system under activity 2.5 began with partners developing a protocol and system for monitoring fishing and the marine environment working with Wildlife Conservation Society Belize. The tool is already being used in CCMNM. CEM has several tools useful for the project initially identified as a part of this activity such as OurFish. The project co-managers have met to discuss tracking infractions. FUCSA has a written registry but not an electronic database. CEM is working to adapt a SMART (Spatial Monitoring and Reporting) tool and the fisheries app OurFish to use for monitoring and enforcement throughout the life of the project.

Output 3 Activities

Under activity 3.1, with the support of the project partners and through an online bibliographic search database, more than 260 publications and reports about related to ecological connectivity the seascape were collected. The database will be available amongst the partners. The methodology for further analysis of data has been agreed upon by partners.

Project partners met regularly to compile information already held within their organisations (3.2). Other secondary information about traditional knowledge has been gathered. Some information from communities and local government staff has been collected through field activities implemented by project partners. LARECOTURH and CEM will be supporting work with focal groups to collect additional

information on agreed upon topics. To identify the gaps in information identified in 3.3, partners are analysing the data and once complete the activities will be prioritised.

The methodology to carry out a study of connectivity in parrotfish and yellowtail snapper was developed under activity 3.4. Samples of both fish are being collected in CSWR, Utila and CCMNM and then sent to The Smithsonian Institution for genetic analysis. Marine biological data gathered in Utila to support the establishment of No-take Zones (recovery zones) using AGRRA and CARICOMP methodologies was completed. Partners are currently writing the final report and next steps will be discussed and agreed together with local fishers.

Secondary information on the various marine habitants in the seascape have been gathered and analysed. This information has been used to analyse satellite images. Field work has been carried out to calibrate and georeference several types of habitats using validation points. Information gathered has been sent to the Smithsonian Institution to produce habitat maps for the Honduran North Coast.

Activity 3.6 is described under 1.7 above. Reports on capture using OurFish were produced for APROCUS users and initial management recommendations for the yellowtail snapper fishery will be produced in Year 2.

Using industrial fishing vessel tracking information from DIGEPESCA, CEM, the Smithsonian Institution and the University of Queensland, carried out an analysis to determine the routes and movements of trawling vessels in Honduras as part of activity 3.7. The product will determine fishing effort and location of fishing activities. Maps produced specifically for the project area did not show a significant threat of trawling in the area although some trawling incidents have been documented near CSWR. With the information about industrial trawling and the analysis of approximately 100 bibliographic sources, a compilation document on trawler fishing (industrial activities, by-catch, rules and regulations, legislation) for the project area was produced and is currently under review and ratification by project partners. The resulting document will be presented to the stakeholder forum to agree upon how best to present it to relevant authorities. It is important to note that the new fishing law has not being approved by the Honduran Government so it is not yet known what articles in the law about trawler fishing were included.

Connected to implementation of activity 3.11, the Documentation and Environmental Interpretation Centre (CREIA) is working on a nationwide information system for monitoring coastal and marine ecosystems. This work is currently funded by GCF. CEM has been meeting with CREIA's director to learn about the system. CEM developed a proposal for an information management protocol for the seascape which is in the process of review and ratification by project partners. Once ratified, it will be presented to CREIA to fine-tune the methodology, agree upon its incorporation in the national system, define responsibilities and determine next steps for implementation.

Output 4 Activities

Nearly all output 4 activities will take place in subsequent years of the project. One activity initiated included strengthening the Coastal and Marine Inter-Community Forum (MICMC) with 25% participation of key participants to date as well as action and finance plans. MICMC also helped strengthen community participation in the forum. LARECOTURH supported the establishment of the Forum. The forum will be meeting on a regular basis and discussion and information flow with its members strengthened during Year 2. Three proposals were developed under activity 4.5 and submitted to the Interamerican Foundation, GEF and Green Grant. None of them have been approved. More proposals will be developed during Year 2.

Output 5 Activities

Helen Schneider of FFI completed a vulnerability webinar as part of activity 5.1. Partners then identified vulnerable groups within the project area. FFI will lead a meeting to decide how Honduran partners will include vulnerable groups in practice throughout the life of the project during Year 2.

Registration of fisherman in the co-management area of the project is nearly complete as identified in activity 5.2. FUCSA is licensing fisherman in 3 communities (Salado Barra, Boca Cerrada and La Rosita). Since the project start a total of 54 licenses were awarded. An additional 35 licenses for local community members of the CSWR were also awarded. In Utila registration will happen in August 2017 when licenses are renewed. CEM assisted FUCSA in the design of the license, machine for fabricating

them and other technical support related to licensing. For CCMNM, the design of the license is under revision by the co-management entities and once approved CEM will support the registration process in the field.

For activity 5.3 FUCSA determined that APROCUS does not have the proper qualifications to be a comanager of CSWR. As a result, they are crafting an alternative collaboration agreement. LARECOTURH worked to improve the business capacity of APROCUS through the establishment of a wholesale fish market serving the towns of Boca Cerrada and Salado Barra. Capacity has been created in APROCUS both from developing project profiles as well as simple funding proposals. As a result, two proposal were produced, one of them being approved for office equipment the other for management and input of information in the OurFish application. Currently all work with fishers have been coordinated by FUCSA and APROCUS. During the governance workshop (5.6), APROCUS requested recognition of artisanal fishing from Honduran Government as an activity to combat poverty and the conservation of natural resources. CEM has been supporting regular meetings to evaluate advance of their 2014-2018 strategic plan. APROCUS elected their new Board of Directors. More than 50% of the positions have been filled by women, including president of the Board.

Stakeholder mapping in 5.4 was carried out for CSWR and Utila. APROCUS training (5.3) is linked to 5.5. Additional training needs were identified including management of the collection centres. As specified by activity 5.7, the cross-learning visit to Mexico was planned and tickets are purchased. The trip will happen in June 2017, rather than last quarter of Yr1.

3.2 Progress towards project Outputs

Output 1. Across the seascape, management of key fisheries, habitats and species are strengthened through coordinated planning and action. At the start of the project, there was a general lack of coordination across the seascape by partners, but this has significantly improved during Yr1. There is some room for improvement in communications and more frequent meetings, for example the newly formed roundtable, but the building blocks are in place for coordinated planning and action. Some examples of coordination included developing the drivers for mangrove loss and mangrove monitoring protocol, synthesis report on yellowtail snapper and a manatee monitoring protocol. The project indicators still stand.

Output 2. Across the seascape, there is increased compliance with regulations and enforcement capacity is enhanced. Activities have started with project partners sharing information about current training provided to Navy personnel related to their respective protected areas, communication with Wildlife Conservation Society about the applicability of the "SMART" app for monitoring and patrols, and investigation (at the request of the marine authorities) of technological options for vessel tracking. FUCSA designed 1 capacity building plan to strengthen patrol personnel. The indicators still stand but partners suggested decreasing the reduction in illegal activities indicator (2.3) from 50% reduction to 30%. The reduction is primarily due to a 50% decrease too ambitious given the timing to process convictions in the legal system.

Output 3. Evidence base for marine conservation and sustainable fisheries management is strengthened, through research and seascape-wide sharing of scientific and traditional knowledge, and is informing seascape management. A large amount of work was completed organizing data, developing monitoring protocols and sharing or synthesizing existing information. At project start there were numerous studies completed by various organizations and researchers but no central repository or access for this information by partners. Partners completed many review documents and plans to advance progress on this output, such as a trawler review document and synthesis reports related to yellowtail, sea cucumber. Plans for managing statistical information and for establishing fishing zones were completed in addition to protocols for biological surveys, genetic analysis and mangrove restoration were also completed. The indicators for Output 3 still hold.

Output 4. The principal seascape stakeholders have enhanced social capital, with a forum and networks for cooperation on participatory marine management, fisheries, ecotourism and other priority development issues which they may identify. The stakeholder forum has been established, with the initial participation of 15 communities. Within the forum, a coordination committee was established which currently has 28% female representation. MICMC helped strengthen community participation in the forum and helped prepare community participation for the first March 2017 forum

meeting. Project partners agreed that indicators for this output are reachable and important to the project.

Output 5. 150 community members, who depend directly on the seascape, have enhanced human capital and are empowered to access and sustainably manage fisheries and strengthen economic enterprises. Output 5 is advancing on schedule, but somewhat unevenly. FUCSA, CEM and LARECOTURH each contributed to strengthening APROCUS and other CSWR stakeholder groups through support to their annual operational plan for 2016-17, a workshop on governance, and, in the case of LARECOTURH, assisting APROCUS to request and obtain an external donation of fishing gear, including four fishing boats, to enable them to fish further offshore and improve the quality of their products. The indicators for output 5 are still valid.

3.3 Progress towards the project Outcome

The essential purpose of the project, to integrate collaborative management across 3 MPAs in an 800,000 hectare seascape, is well underway and outcome indicators remain valid. It is clear there exists a joint effort between the project partners. Project partners have collaborated on numerous projects including establishment of 2 community nurseries, 1 pilot mangrove restoration site, 13 priority areas for mangrove restoration identified and 3 permanent monitoring plots. Communities and fishers are being registered in a centralized project database with accompanying licensing and the app OurFish used to track harvest with collecting centres providing data from catches.

Partners developed a simplified methodology for monitoring mangrove restoration, technological tools for data gathering relevant to country level fisheries, a database for information sharing, protocols for studying the ecosystems of the project area. Partners worked to strengthen APROCUS and began socioeconomic studies covering the fishing reserve zone. Partners completed the water quality monitoring methodology to start addressing pollutants, nearshore water turbidity and sedimentation.

During the Honduran Fishing Forum FUCSA presented a statement requesting a gill net ban of gill nets in MPAs due to the threat to marine turtles and manatees. FCC has been increasing the participation of young community members in conservation of turtle nesting beaches and in the delivery of awareness activities. The Gararu festival helped increase community awareness and participation in marine conservation. FIB produced environmental education materials for mangrove and Utila iguana conservation.

The first step for recognition of access rights started with registration of 54 artisanal fishers. Decommissioning illegal fishing gear has also increased especially near la Rosita y Boca Cerrada, the town of Tela and in the Bay Islands.

Some initial achievements were registered for sustainable livelihoods. For example, there was an increase in family fisheries income. This was due to an increase of \$0.26/lb in the price of fish, representing an increase of 24% for the community of Boca Cerrada. In a second community where the survey was employed, LARECOTURH found an increase of \$0.14/lb in prices representing a 14% increase.

3.4 Monitoring of assumptions

All 23 assumptions stated in the logframe continue to apply and be relevant to the project. Assumption statements have been shortened to save space. For complete statement please refer to it. Below are some brief comments to the ones which activities/results during Yr1 have supported the statement.

OUTCOME

<u>Assumption 1:</u> We assume that government and co-managers continue the policy of strengthening community participation in MPA governance. <u>Comment</u>: Co-management agreement under development between FUCSA and ICF and taking into account ways to legally incorporate APROCUS (fishing association) in the co-management activities (see activity 5.3)

<u>Assumption 2:</u> We assume that if authorities, co- managers and stakeholders perceive benefits from seascape-wide networking and cooperation, they will continue to collaborate. <u>Comment:</u> All participating project partners and communities have expressed the importance of this project for consolidating seascape work and cooperation. Perceptions will continue being monitored

<u>Assumption 3:</u> For each of the three flagship species there are known threats, which can be mitigated through increased public engagement. <u>Comment:</u> main threats for their survival are known, protocols for monitoring are developed or have been updated. Community members are participating in monitoring, conservation and awareness activities (activities 1.2, 1.8). Baseline has been collected and will be reported on in Yr2.

<u>Assumption 4:</u> We expect to be able to report continuing post-project improvements in species populations, ecosystem status, fish populations and catches, and livelihoods beyond EOP. <u>Comment</u>: There is a strong desire by partners to continue this monitoring after EOP. Monitoring protocol and systems for species, and habits are being developed/updated and has far as possible it aims to incorporate them in national process (see activities 1.2, 1.8, 2.2 amongst others)

Assumption 5: We assume that the direct improvements obtained by 250 community members, fishers and other vulnerable groups, will benefit their households. <u>Comment</u>: During Yr1 of implementation three fish landing centres have been created in communities. This has created 9 (6 women 3 men) additional work places (managed in a rotation to benefit more community members). Other income opportunities have resulted from increased tourism related activities as well as a fishing tournament and direct sales by community members (activity 5.9).

<u>Assumption 6</u>: Quantitative income indicators assume reasonable degree of success in enabling community groups to obtain additional funding for livelihood initiatives from other sources. <u>Comment:</u> Baseline has been determined and monitored throughout the project. Work on livelihoods is a big part of work of Yr2 activities.

OUTPUT 1

<u>Assumption 7:</u> Habitat measures would be developed through participatory governance mechanisms involving MPA co-managers and stakeholder groups. <u>Comment</u>: Co-managers and stakeholders are committed to this approach. Information gathered and interaction with the stakeholder forum will provide the right channels for reaching agreements,

<u>Assumption 8:</u> We assume the oil palm managers will continue to dialogue with stakeholders and authorities about reducing proven impacts of their operations. <u>Comment:</u> In 2016 FUCSA signed an MoU with the JAREMAR-CAICESA Group (processing oil palm plant located within the seascape around CSWR). Also, FUCSA has a seat in the Advisory Certification Committee for the RSPO (Roundtable on Sustainable Palm Oil) representing the environmental sector of Honduras.

<u>Assumption 9:</u> We assume that the NGO co-managers of the three MPAs will broadly maintain their current levels of management capacity and operating revenue as a minimum. Thus, the improvements through this Darwin project will be incremental. <u>Comments:</u> Co-managers are in the constant search for additional funding. Currently they are applying for funds for the GCF, Protected Areas Fund and other sources.

<u>Assumption 10:</u> The agreed priority management measures will be initiated through this project, to achieve EOP aims, and co- managers will continue the activities beyond the project. All parties will cooperate with efforts to secure additional funding. <u>Comments:</u> This assumption is one of the very essences of the project and the coordinated work to date support this assumption.

OUTPUT 2

Assumption 11: We assume that, CEM, the Smithsonian Institution and the Government of Honduras will continue with the roll-out of the surveillance, monitoring and fisher security system. Our project's role is to complement with activities to build Navy personnel capacity and to increase the social acceptability of regulations through stakeholder participation. Comment: a training course has been designed for NAVY personnel and will be incorporated in their academic curriculum (activity 2.1)

<u>Assumption 12</u>: As mentioned in CEM's letter, we assume that the Government will continue its efforts at a national level to establish effective control of marine activities, which have already delivered noteworthy results.

<u>Assumption 13:</u> We assume that empowerment, especially secure resource access and increased involvement in generating and debating information for management decisions, will increase willingness

to comply. However, perceptions of the **feasibility** of compliance will depend on the progress of improving livelihoods, so there is an iterative process of improving compliance and livelihoods in tandem.

OUTPUT 3

<u>Assumption 14:</u> We assume the Honduran Government will be open to dialogue about restrictions on bottom trawling and other destructive fishing practices. The bottom trawling is already infrequent, and is prohibited within the MPAs but not seascape-wide. However, recent legislation relaxes restrictions and it is important to counteract initiatives to revitalise industrial fishing and expand its activities. The recently produced report on trawler fishing by CEM should help to advocate for a trawler ban.

<u>Assumption 15</u>: We assume the Honduran Government, co-managers and communities will be willing to use evidence based on scientific and traditional knowledge to support new conservation and livelihood measures.

OUTPUT 4

<u>Assumption 16:</u> We assume co-managers are willing and interested in aligning and developing joint regulations and marine management plans. <u>Comment:</u> The three MPA co-managers are part of the project and continue to be committed to do so.

<u>Assumption 17:</u> We assume that, with good preparation and expert facilitation, any barriers to networking between coastal communities can be overcome.

<u>Assumption 18:</u> We assume that donors will be interested in community proposals developed through this process. <u>Comment:</u> Despite GEF funds not supporting project activities yet, they still express their intentions to do so. IAF expressed interest in approving the proposal submitted to them (activity 4.5)

OUTPUT 5

<u>Assumption 19</u>: We assume that coastal communities will be willing to invest the time necessary for effective participation. Experience suggests that they will if they truly influence decisions.

<u>Assumption 20:</u> We assume that fisheries access rights system can be readily adapted to local context and needs. <u>Comment:</u> CSWR and communities are really interested in the approach, almost finalised the register of fishers as a first step and currently learning and discussing the best approach for their local reality (activity 5.2)

<u>Assumption 21</u>: We assume that coastal communities will have sufficient commitment to develop the capacities needed for improved fisheries-related livelihoods and for improved or new enterprises linked to the tourism market in this part of Honduras. <u>Comment:</u> APROCUS has been improving their capacities, implemented collection centres, and started to open direct markets for their products. Communities at CSWR are very interested in developing sustainable livelihoods linked to the tourism (birdwatching) and sport fishing.

<u>Assumption 22</u>: We assume that existing tourism volumes in this part of Honduras will be maintained so that there continues to be scope for small, ecotourism-related enterprises. <u>Comment</u>: For 2017, the expected growth in the tourism sector is expected to grow between 10 to 15 %.

<u>Assumption 23:</u> We assume that food insecurity is caused largely by limited capacity to access resources, low income from fishing, high dependence on fishing and declining fish stocks in estuarine and nearshore areas.

3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation

The project is projected to include at least 250 households to contribute to poverty reduction with involvement of more than 500 fishers. The conservation and proper management of the resources of the protected area, entails the generation of opportunities for the Marine Landscape, associated species and ecosystem services, such as water quality, recreation and biodiversity. Economic alternatives are starting to be incorporated into the project and organizations strengthened, for example through the establishment of 2 fish landing centres in the APROCUS communities. Through these centres, women and youths are integrated in the administration of the cooperative through rotating jobs that allow the generation of an average income of \$150 (£116)/month/person. Additionally, fisher's wives offer food

services to domestic and foreign tourists and families benefit further through provision of boat transportation and guide services.

Work to increase natural capital is occurring at multiple levels from jurisdictional, in the form of management of the protected areas, to increased efforts to restore and protect threatened or endangered species. Spatial analysis of the ecosystem is not only helping improve management but also increasing access to seascape information. Landscape to site scale monitoring as well as standardization of monitoring methods across participating partners and the seascape further helps increase the quality of data, access to information, increased social capital of the organizations and contributes to testing the long-term success and replicability of the project. Natural capital is further increased through ecological and socioeconomic studies, such as the yellowtail and parrotfish population study. This research also helps secure local community access to resources and help the artisanal fishery become more resilient and sustainable. A further benefit of this work is building knowledge and capacity of the local cooperative in managing fish stocks.

Building the three dimensions of well-being, natural, human and social capital is starting to create a virtuous cycle of improvement in the region. If the marine environment is healthy, communities are working to decrease poverty and conservation guides assist visiting tourists, then more tourists will visit, bringing in more resources that can further help protect the natural resources of the region and benefit local communities.

With the implementation of the Darwin Project, people in the communities are taking increased ownership of the management and protection of marine resources. In Cayos Cochinos, for example, community participation in the conservation of sea turtles allows discussion of conservation of other species. For example, iguana conservation or working to decrease the amount of garbage from the village that finds its way into the sea and harm marine life or interferes with turtle spawning and nesting.

The identification of drivers or factors that affect and influence the ecological stability of mangroves and threatened species in Utila contributed to establish improved management of those species on the island. Similar to the approach to mitigate solid waste in Cayos Cocinos, local communities are addressing garbage and its impacts on the project's priority species and mangroves whilst linking their work to broader environmental awareness raising. Design of informative banners to be placed in strategic places so that tourists and locals can learn about Utila's unique species and biodiversity.

As another example, the hawksbill turtle, a focal conservation species for this project, is a charismatic secies in the worldview of the Garifuna culture. As a result, promoting activities such as the Gararu Festival contributes to recognition of traditional knowledge and expertise and connects cultural preservation to long-term turtle conservation

4. Contribution to the Global Goals for Sustainable Development (SDGs)

The project as a whole contributes to several Sustainable Development Goals:

<u>SDG1 End poverty in all its forms everywhere</u>. All activities implemented this year contribute to this SDG

<u>SDG 2 End hunger, achieve food security and improved nutrition and promote sustainable</u>
<u>agriculture</u>. Activities in YR 1 contributed to this SDG by improving commercialisation of fishing catches through creation of fish landing centres and associated new employment opportunities linked to those centres as well as support in the development of commercialisation pathways for fish products.

SDG 5 Achieve gender equality and empower all women and girls. Gender equity is widely promoted and women take a more active role every day. The project contributed to this SDG in Yr1 through an increase in participation of women in the management of the fishing association APROCUS. This increase is evidenced in a higher representation of women in the newly elected Board of Directors including the president and vice-president. Contributing to the prominent participation of women is the newly established fish landing centres and by the increased participation in tourism activities such as selling food and handicrafts and guide services. All co-managers reported increased participation by women is being encouraged in workshops and meetings. Several partners reported development of livelihood related ventures specifically targeted to women as a future activity.

SDG 14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development. In Yr1 the project contributed to increased scientific knowledge of the seascape by collecting, generating and analysing scientific information related to species (biological information in Utila to propose no take areas for fishing, compilation information of yellowtail snapper), ecosystems (collection and analysis of information for habitat mapping), improving protection of endangered species through species/habitat protection (protecting marine turtle nesting sites), environmental education/awareness activities (Gararu festival in CCMNM), fish harvest information (OurFish) improvement of monitoring protocols for certain ecosystems (mangrove) and certain species (Utila iguana, manatee), and identification of threats to mangroves. Contributing to SDG14 was improved access rights for small-scale artisanal fishers, access to markets (fishing community association APROCUS garnered a contract sell fish directly to a prestigious hotel in the area), and by supporting the establishment of fish landing centres. Strengthening the collaboration between MPA co-managers and other stakeholder to improve management of the entire seascape likewise contributed to this goal.

5. Project support to the Conventions, Treaties or Agreements

The Darwin project focuses on CBD Articles 8 (in-situ conservation) and 10 (sustainable use of biodiversity) and supports achievement of Aichi targets under Strategic Goal B, Reduce the direct pressures on biodiversity and promote sustainable use. Targets 6 (ecosystem-based approach and overfishing), 8 (pollution), 9 (alien species) and 10 (coral reefs). The Project is also contributing to CBD through the patrols and protection of marine turtle nesting sites. At the same time, it is working towards community knowledge of marine turtle, manatee and Utila iguana conservation. This follows the Strategic Objective C: Improve the situation of biological diversity, safeguarding ecosystems, species and genetic diversity. It also contributes to completion of Aichi Target 12, regarding preventing the extinction of threatened species and improving their status.

The Bay Islands Foundation is contributing to at least three objectives of CBD, in particular Article 8. sections (d) and (f) through the development and implementation of plans or other management strategies. The breeding program of Utila iguana, an endemic species on the UICN red list, as well as establishment of mangrove parcels to collect data related to habitat health and ecological integrity contribute to fulfilling these articles.

Scientific information (Target 19) is being addressed through the compilation of information and studies, led by CEM and described in the results under Output 3. Traditional knowledge (Target 18) also underpins the project, and is in line with national policy. Community engagement through endogenous community conservation and development was initiated during Yr1 of the project and led through the stakeholder forum and MICMC.

At a capacity building level, the project contributes to CBD objective three (fair and equitable sharing of the benefits arising out of the utilization of genetic resources) in two important ways: 1) strengthening APROCUS to manage the fisheries resource; and 2) strengthening formation of MICMC that engages villages and municipalities throughout the region to integrate the conservation work in the triad of the project's protected areas.

The Mesoamerican Reef is a GEF priority including GEF goals of strengthening stakeholder participation in the region's MPAs and developing sustainable financing mechanisms. The Darwin initiative held several meetings with GEF leadership during Yr1 but no funding has been secured to date. Since GEF intends to collaborate with the Darwin project, we expect to leverage both co-project financing and additional investment in seascape management measures, thereby intensifying the impact on achievement of Aichi targets.

Due to high poverty levels and vulnerability to climate change, the Honduran Government accords high priority to Targets 14 (equitable distribution of benefits) and 15 (ecosystem resilience and climate adaptation), both addressed by project through community involvement, increased inclusion of vulnerable groups and women. Equitable distribution of benefits was initiated through involvement of communities, APROCUS strengthening and increasing the well-being of fishers. The latter had an initial boost in Yr1 through an increase in fish prices sold by the cooperative.

FCC interacted with the Honduran convention focal point known as Dirección de Biodiversidad (DIBIO) within the Environment Ministry. Through DIBIO, they coordinate a Marine Turtles Regional Technical

Committee (COTTOM). The committee is working on the Marine Turtle Research Conservation and Protocol and implementation of the Second School for Marine Turtle Conservation. FUCSA and FCC are also working with DIBIO through the restructuring of a National Wetland Committee that has direct bearing on the wetland habitat in the project.

6. Project support to poverty alleviation

The following achievements in Yr1 are highlighted: 1) alliance of the five project partners, which has made it possible to combine technical, financial and human resources; 2) improvement of the institutional capacity of APROCUS, particularly through purchase and management of the new fish landing centres; 3) incorporation of fisher groups outside the MPAs; 4) Strengthening of MICMC and its membership that helped strengthen community participation in the forum; and 5) Initiation of community-based marketing agreements. For example, a fish purchase agreement was reached with a prestigious hotel and Boca Cerrada fishers.

The communities that integrate the marine landscape depend to a great extent on fishing and ecotourism resources. As part of the project, FCC is working with a group of young adults developing them as conservation-based tourist guides in the Conservation Guides Program. The program offers participants an alternative to livelihoods available in local communities and a chance to escape current poverty. Other initiatives are being carried out such as the management of fish landing centres that directly contribute to economic benefits linked to poverty alleviation. During Yr1, partners collected catch data to track the relative well-being of fishers. Over time the information will be analysed for economic well-being metrics and ultimately determine whether changes in fishing management practices are contributing to poverty alleviation.

The project is strengthening the organisational and business capacities of fishermen, as well as a more participatory governance that gives fishers access, use and control of their natural resources. At the business level, the net profit for fishers increased by improving capture and quality control processes. We believe the commercial fish population and fishing zone studies that are currently being finalised will contribute to reducing poverty, leading to more sustainable fish stock management and income generation.

Indirect benefits are also expected, generating income for families through economic alternatives, such as handicrafts related to sea turtle conservation. Improved tourism by betterment of the resource through restoration, management and species conservation is another indirect benefit for poverty alleviation. Reducing the vulnerability of wetlands and mangroves will help local communities be more resilient to climate change and, it is hoped, make them more economically resilient. This will have to be tested in the long-term, however. In general, increased participation and education of women leads to poverty alleviation. Building institutional and organizational capacity also will indirectly lead to poverty alleviation. Finally involving the identified vulnerable groups, typically those that are most subjected to extreme poverty, will have an indirect impact on poverty alleviation.

7. Project support to gender equality issues

Within the framework of the project, gender equity is widely promoted and women are already taking a more active role in project activities. In fact, APROCUS is led by a woman, and 3 of 7 board members are women. APROCUS is also working with economic participation through the spouses of fishers, particularly marketing and selling their products. The community roundtable has been encouraging women's participation and the forum will continue with the same approach. MPA co-managers are also promoting the same within their MPA and during the process of identification of sustainable livelihoods, gender equity will be an important consideration.

8. Monitoring and evaluation

FFI steers the project to keep it on the track as set out in the log frame, while accommodating the fact that each partner has their own way of operating. FFI have been ensuring proper fund administration and accounting as well as providing technical support to partners. Implementation is guided by the proposal approved by The Darwin Initiative and by individual grant agreements signed with partners.

A Project Steering Group (PSG), comprising six partners was established and has been overseeing and guiding the project implementation. It has been meeting quarterly to review progress and plans, including

updates on monitoring results and assumptions. General communications have taken place by face-to-face meetings, field visits, phone, and apps such Skype. Basecamp online software is being used to share information and foster interaction between partners. During Yr2 the PSG needs to increase the frequency of meetings to be able to progress in a more expedited way. This is particularly true for topics in which a consensus is difficult to reach or an activity that needs constant follow up.

Monitoring protocols for each project indicator and reporting responsibilities have been agreed upon by partners. In addition, indicator baselines have been established. In general terms, information for reporting on the indicators have been gathered, although in some cases it seems that they have not been reported properly due to different interpretation of the procedures. During Yr2 implementation planning session with local partners in Honduras, monitoring plans and procedures will be reviewed and revised as necessary. FFI will closely monitor data collection in the coming semester to ensure all partners have incorporated the protocols and data collection and reporting is done as envisaged.

FFI and partners understand the usefulness of tracking indicators properly, recognising that it can be a complex process, protocols may need revision, and gathering high quality data takes time. Improving monitoring across multiple partners in the seascape is part of capacity building and added value to the project.

9. Lessons learnt

The following are lessons learnt during Yr1 of the project:

- Communications and leadership between project partners made a great start but still has room for improvement. Although there are excellent results from the first year there needs to be additional follow-up and clear project communications to continue. There is a management committee of the partners and participants felt their role was critical for achievements to date. At another level of governance, the roundtable needs to be better defined.
- Evaluation of results amongst partners is important for capacity building. Within the forum, partners found that cross-walking and evaluating results across partners is valuable to have a common structure focused on mutual objectives.
- Keeping government agencies up-to-speed is critical. Through project implementation activities, partners have been in contact with government agencies, updating them on the progress and challenges on a case-by-case basis. A more formal approach will be implemented in Yr2 now that the stakeholder forum (Activity 4.1) has been established.
- Project evaluation needs better definition. LARECOTURH mentioned that some of the technical
 activities of the project started without a baseline or a defined system of monitoring and evaluation. If
 starting over again they recommended creating the M&E system and establishing the baseline for
 indicators from the outset.
- Marine monitoring results take time. On project partner commented that at least one year of systematic monitoring is required to determine sources of water pollution and sedimentation in the marine environment.
- Mangrove restoration is costly. Strategies for identifying voluntary participation to reduce costs should be considered. FCC noted that the good inter-institutional relations between FCC and Universities permitted consistent participation of volunteers in the program as well as reduction in costs.
- Landscape scale conservation is critical ecologically and for community livelihoods. The project emphasized landscape conservation and marine ecological connectivity from the start. This created the understanding of the interconnectedness of both illegal actions and conservation actions from the local to regional scales.
- Participation of Conservation Guides at the site scale allowed improves conservation actions for marine turtles.
- **Simplify reporting**. One partners asked for a simplified reporting format that also helps with communications.

10. Actions taken in response to previous reviews (if applicable)

Not applicable.

11. Other comments on progress not covered elsewhere

One interesting item not yet mentioned is the development of the quality of relationships between the organizations, how they are evolving and coming to agreements with mutual interests. This has led to better project execution at both the protected area management and community development sides. LARECOTURH observed that technology is key to coordinating with the partners: "The most significant difficulty is the differences of methodologies according to each of the partner's experiences, however through video conferences, chat and facilitation, the partners managed to decide which route should be taken to obtain the best results." The Project does not have any inherent risks in its design or partners but it does depend on some results related to third parties. For example, timely prosecution of offenders related to marine laws. However, the partners feel that the indicators are still realistic and reachable at this moment.

12. Sustainability and legacy

Involvement of local communities has been particularly active through engaging local fishers and integrating fish marketing with their wives. The change of perception, opinion and decision-making for responsible fishing and business management that increase the profitability of marketable products, helps to awaken community interest in conservation and sustainable development.

With regards to finances, there is a community support fund that comes from the MPA tourist entry fee called Fare Rate Regime. Fare Rate Regime could be a sustainable finance mechanism to support the different seascape initiatives. A stable finance mechanism may also contribute greatly to the social, economic, ecological and technical sustainability of the project. FFI will work with partners in Yr2 to further develop use of this possibility.

FCC is working with different initiatives that contribute to the success of the project, such as the constant strengthening of a group of community leaders through the Community Fisheries Commission. Another is the strengthening of the Association of Community Tourism Operators, a space for community decision-making to address issues related to tourism service providers in the MPA.

In terms of the project's open access plan and connected to implementation of activity 3.11, CREIA is working on a nation-wide information system for monitoring coastal and marine ecosystems. CEM developed an information management protocol for the seascape which is in the process of review by project partners. Once ratified, it will be presented to CREIA to fine-tune the methodology, agree upon its incorporation in the national system, define responsibilities and determine next steps for implementation.

The exit strategy is still valid and we are not currently planning to make changes to the original proposed project

13. Darwin identity

The Darwin Initiative project has a clear identity. Partners, community members and local authorities identified the project as a distinct priority in the seascape. When other sources of funding/support have contributed to a specific activity, prominent recognition is given to the Darwin Initiative. The Darwin Initiative logo is used by all local partners in project related publications, documentation and workshops. In addition, at every meeting, workshop and community activity, there is mention of the UK government support through The Darwin Initiative and, time permitting, a broader explanation about the Initiative. At each workshop, an attendance registry with the Darwin logo is signed by the participants.

Outside of the project area the Darwin Initiative is less known, mainly by some NGOs and environmentalists, and specific staff members within government institutions with whom project partners have worked. To further support the publicity about the Initiative, project partners mention the Darwin Initiative when attending events and meetings outside the seascape.

Partners use social media, largely Facebook and Twitter, to publicise the work they do. In some of the posts they mention activities supported by Darwin. This is done in an *ad hoc* manner but the necessity of being more strategic about the content and frequency of these posts has been discussed internally. Various partners are in the process of updating their webpages and links to the Darwin Initiative will be placed in appropriate locations when promoting the project. For Yr2, all partners will increase their social presence and improve the dissemination of the Initiative thorough those channels.

14. Project expenditures

Table 1: Project expenditure <u>during the reporting period</u> (1 April 2016 – 31 March 2017)

Project spend (indicative) since last annual report	2016/17 Grant (£)	2016/17 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)			-5.4%	
FFI Robert Bensted-Smith - Project Leader			-18.9%	Extra time to develop M&E and part of funds for M&E under others. Total variation of salaries remained within 10% margin
FFI Mary Rider			0.0%	
FFI GIS spec Andy Cameroon			0.1%	
REC Marcio Rivera			5.7%	
REC Icauri Ramos			-14.5%	Increased due to fall in value of pound. Not discussed as the difference was offset by RECOTURH charging less to the project in the other two positions funded by Darwin and co-financing that time. T total cost of salaries remained within 10% margin
REC Iris Castro			7.8%	
CEM staff - Jorge Anariba			0.0%	
CEM staff - Cristhian Perez			0.0%	
FUCSA – Oscar Lanza			-24.0%	Increased due to fall in value of pound. Not discussed as total cost of salaries remained within 10% margin
FIB Staff - Francisco Cabañas			1.1%	
FCC Staff - Marcio Aronne			1.3%	
Consultancy costs			27.2%	lower expenditure as trainer from Belize just requested the project to cover workshop expenses
Overhead Costs			3.8%	
Travel and subsistence			0.4%	
Operating Costs			7.4%	
Capital items (see below)			-6%	

10 android devices + cases for data collection		0%	
2 GPS		-8%	
2 Computer		0%	
2 Camera		-37%	Increased due to fall in value of pound. Not discussed because difference was small and the total cost of capital items remained within 10% margin
1 Weather monitoring equipment		-2%	
1 Computer for data collection		-5%	
Others (see below)		79%	
Baseline set up M&E		96%	Time to develop M&E reported under salaries. A study about sources of pollution in water sources was not possible to be carried out. This will be done in Yr 2 and covered by co-finance funds.
Communications Materials		59%	Expenditure less than expected due to some of this materials bee in covered by partners from their own sources and some delays in establishing the stakeholder forum with resulted in less expenditure
Bank Charges - Transfers to partners		25%	3 transfers made to partners instead of 4 (two transfers merged in one).
TOTAL			

15. Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2016-2017

Project summary	Measurable Indicators	Progress and Achievements April 2016 - March 2017	Actions required/planned for next period
Impact: The Honduran section of Mo marine habitat and species are prote while participating coastal communit food security, and reduced vulnerable	ected and sustainably managed, ies enjoy improved livelihoods and	Partners planned the actions required to generate baseline information in order to generate appropriate resource management decisions. Significant progress has been made in this regard with regard to beneficiary identification and socialization of the project proposal with its different components of protection and conservation, generation of livelihood opportunities with broad participatory governance.	
Outcome: Integrated, collaborative management established across an 800,000-hectare seascape, encompassing 3 MPA's, thereby protecting critical habitats and species, making fisheries more sustainable, and improving livelihoods and food security of 1000 people.	0.1 20 ha of mangrove restored and 200 ha with improved protection by EOP.	0.1 In CSWR two community nurseries for mangrove restoration were established, 13 areas identified for restoration, 1 ha of mangrove restored (act 1.2) and 3 mangrove monitoring plots established. In Utila the drivers of mangrove loss were identified and the first draft of mitigation measures developed. Biological baseline for proposing no take areas collected.	0.1 Continue restoring other areas identified (at least another 9-10 ha), and monitor growth/survival of reforested areas. Finalise mitigation measures documents in Utila and discuss /agree with local stakeholders the concrete actions to protect/restore mangrove ecosystem including utilising the baseline to develop concrete management actions.
	0.2 In CSWR estuary at least one major source of sediment and pollutants has modified practices, reducing nearshore turbidity by EOP.	0.2 Methodology to monitor water quality developed.	0.2 Implement monitoring methodology during Yr2 to determine sources of pollution and sedimentation and then propose remediation actions to reduce sediments and pollutants.
	0.3 At CSWR estuary and Laguna de Cacao (CCMNM) harmful fishing	0.3 In CSWR fishers monitoring fishing activities through OurFish app. No	0.3 During Yr2 FUCSA will continue

	practices have been reduced by 20%	advance in CCMNM.	providing assistance to fish landing
	by EOP.		centres to continue monitoring capture.
	0.4 By EOP measures are implemented to reverse decline of CPUE and mean size of yellowtail snapper (<i>Ocyurus chrysurus</i>), with systems to monitor that trend, and plans to extend the same approach to other seascape fisheries.	0.4 Three landing centres providing catch information through OurFish app. 54 fishers registered in CSWR.	0.4 Improvement and expansion of data collection using OurFish. Production of automated reports available for end users. Carry out additional registration of fishers in CWSR and other MPAs.
	0.5 By EOP, bottom trawling within seascape reduced to <5 incidents per year, of which at least 50% are followed up by authorities.	0.5 CEM put together a bottom trawler study.	0.5 Study presented to partners and used to determine subsequent management and policy actions.
	0.6 By EOP, threats to hawksbill turtle, Utila iguana and manatee are reduced through increased public commitment and participation in protection and monitoring	0.6 FUCSA presented a statement in an open forum about fishing in Honduras requesting the ban of gill nets from MPAs due to the threat to marine turtles and manatees. FCC has been increasing the participation of young community members in conservation of turtle nesting beaches and in the delivery of awareness activities. Increased participation in community awareness campaigns such as Gararu festival. FIB produced awareness materials for mangrove and Utila iguana conservation.	0.6 To continue advocating for a trawling ban or stronger trawler regulations in the MPA. To increase community participation in monitoring activities in all MPAs and use of the stakeholder forum to increase support towards reduction of threats/conversation of flagship species.
	0.7 Livelihoods		
	0.7a Fishing or ecotourism-related livelihoods: By EOP, at least 100 households have increased their	0.7a Ecotourism represents the second economic development alternative in the MPA communities	0.7a Diversify tourist services to increase the number of economic beneficiaries.
18	Houselloids Have illoleased tileli	alternative in the WPA communities	Deficitionies.

income from marine resources by at least 15% relative to SOP baseline by increasing the value of fisheries products and/or increasing income from provision of goods and services to the tourism industry.	after fishing. In Salado Barra earnings are generated for boat rentals from tourists.	
0.7b Inclusion and empowerment: (i) at least 80 fishers by project mid-point and 200 fishers by EOP have officially recognised fisheries access rights (ii) by EOP, in 70% of seascape villages the primary stakeholders report substantially stronger influence on MPA management decisions than before the project.	0.7b (i) First step for recognition of access right almost fulfilled. 54 artisanal fisher registered in CSWR	0.7b Identity card for all MPA residents.
0.7c Cooperation with other stakeholders: (i) By EOP the seascape stakeholder forum has achieved consensus on actions to address at least 2 major fisheries issues (1 by project mid-point) and at least 1 external threat to the seascape which impact the livelihoods of marginalized fishing communities (ii) By EOP there has been a 50% reduction in incidences of conflict over fisheries and marine resources.	0.7c (ii) Seizures of illegal equipment and fishing boats have increased especially in La Rosita and Boca Cerrada.	0.7c (ii) Continue to manage the expansion of maritime boundaries and strengthen monitoring control through training and provision of basic logistics.
0.7d Food security: By EOP, at least 80 low income households able to meet household food requirements during periods of unfavourable weather without resorting to unsustainable harvesting of juvenile		

	marine organisms	
	0.7e Marine resource status: By EOP, at least 60% of women and 60% of men report that the project has contributed to improvements in the health and sustainability of the marine resources on which they depend.	
Output 1. Across the seascape, management of key fisheries, habitats and species are strengthened through coordinated planning and action.	1.1 Spatial management priorities for seascape agreed amongst stakeholders and co-managers by Sept 2018 and 3 or more measures benefitting fisheries under implementation by EOP.	1.1 Discussions happening with partners. In Yr2 those discussions will be incorporated in the forum, supported by habitat maps and other information produced.
	1.2 Habitat conservation measures agreed and adopted by seascape stakeholders, co-managers and authorities: (i) mangrove protection/restoration, (ii) elimination of bottom trawling, (iii) sediment and pollutant reduction by commercial agriculture at estuaries, (iv) management measures for fisheries in estuaries and coastal lagoons, (v) other measures tbd with stakeholders. At least 1 of these by December 2016, 3 by December 2017, 4 by EOP.	1.2 At the seascape level, drivers of mangrove loss identified and monitoring protocol developed. Monitoring plots established. At national level, coordination with the National Committee for Wetlands to include it in the national protocol. One ha of mangrove restored and additional sites identified for restoration in Yr2.
	1.3 Seascape-wide yellowtail snapper (Ocyurus chrysurus) fishery management and monitoring plan agreed and adopted by December 2017 and in implementation by March 2018.	1.3 Synthesis report on yellowtail snapper produced and fisheries and monitoring plan to be produced and measures agreed in Yr2.

1.4 Numbers of people and institutions engaged actively in conservation and monitoring of manatee, hawksbill turtle and Utila iguana increased by 30% by March 2017 and 60% by EOP.	1.4 The manatee monitoring protocol was updated to include greater local participation in its future implementation. Increased participation of locals in conservation activities of marine turtles in CCMNM.
Activity	Progress on Activities
Activity 1.1 Discuss the findings of the spatial management assessment (see output 3) amongst the MPA co-managers and with the stakeholder forum, and facilitate agreement on consequent management decisions and actions in individual MPAs, the unprotected area or seascape-wide. Support initial implementation of priority newmeasures.	Progress has been made during internal discussions amongst partners on how to incorporate the spatial management assessment into future management and conservation science actions. During Yr2 the discussions will continue with partners, communities and the forum.
Activity 1.2 Support implementation of priority mangrove conservation activities in the seascape, including removal of introduced African Oil Palm, restoration by local groups (predominantly women), and demarcation of boundaries to curb cutting and livestock incursions	At seascape level, a simple mangrove monitoring protocol (under revision by project partners and by the Smithsonian Institution) was developed using the CARICOMP methodology. The protocol includes a methodology to detect mangrove stress. At the national level, CEM is coordinating with the National Committee for Wetlands who plan to develop a national mangrove monitoring protocol subsuming the Darwin project protocol.
	In Utila and CSWR drivers of mangrove loss have been identified and strategy to address them under development. Mangrove monitoring plots have been established in Utila and CSWR. Two community nurseries are established to restore areas identified with a capacity of 9,000 saplings each. One hectare mangrove planted in Laguna del Cacao
	CSWR no boundary demarcation as this is too expensive at the moment. Possibly completed in Yr2.
	Eradication of Oil palm will be started in Yr2.
Activity 1.3 Present the assessment of bottom trawling impacts (see output 3) to the MPA co-managers and the stakeholder forum for discussion and decisions on a proposal to government on policy and actions. Support preparation and presentation of this proposal by stakeholders and co-managers to government	The assessment of bottom trawling in the seascape has been shared with MPA managers and once validated in Yr2 will be presented to the stakeholder forum.
Activity 1.4 Present to the MPA co-managers, the stakeholder forum, municipal authorities and agricultural stakeholders the assessment of seascape estuaries	To be implemented in Yr2.

and coastal lagoons, including their role in sustaining marine and brackish water fish populations, their connectivity with sea grass beds and reefs, their pollution (including oil palm waste) and sediment problems, and their use by women and men for subsistence fisheries	
Activity 1.5 Facilitate the development of affordable action plans for estuaries/lagoons, which would include measures by plantations to reduce pollution and sediment and monitor changes, and promote its implementation in priority sites (CSWR estuary, Cacao lagoon).	To be implemented in Yr2.
Activity 1.6 Work with local users, principally subsistence fishers but also commercial fishers and tourism users, to understand the multi-species fisheries in estuaries and lagoons and their inter-dependence with marine fish populations. Develop community action plans to improve fisheries and make them more sustainable fisheries, with emphasis on subsistence fisheries by vulnerable groups and use of inshore areas in periods when weather prevents ocean fishing. Contribute technical support to implementation and participatory monitoring.	To be implemented in Yr2.
Activity 1.7 Present the findings of the yellowtail snapper studies (see output 3) to the MPA co-managers and the stakeholder forum, to discuss and decide actions to improve the management and sustainable use of the resource, as well as potential implications for other fisheries in the seascape. Contribute technical support to implementation and participatory monitoring.	Secondary information (ecology, artisanal and industrial fisheries, market & community dependencies) about yellowtail snapper analysed and a synthesis report produced. In Yr2 this document will be presented to the forum to discuss and then take decisions to improve management.
Activity 1.8 Enable NGO lead agency for each flagship species to present species status and action plans to stakeholder forum, where actions to enhance custodianship and stimulate participation by seascape users will be agreed. Provide small-scale support to actions by stakeholders to reduce threats (by-	Informative banners in Spanish and English were created to increase awareness for mangrove and Utila Iguana conservation. They have been used in community meetings and with youth environmental education activities. Gararu festival included environmental education, participation of approximately 80 people.
catch, collisions, killing for consumption, habitat degradation).	Manatee monitoring methodology to increase community participation updated. In Yr2 monitoring plots for aquatic vegetation will be established and presentation of updated methodology to the forum will be presented.
	62 nocturnal and 25 day patrols for marine turtles utilising 45 volunteers took place.
Activity 1.9 Collaborate on the development of funding proposals for further implementation and expansion of the seascape management activities developed under this project.	Darwin Project was presented to GEF and the GEF's project leader stills shows interest in supporting it. Multiple communications have been held with GEF, the project is still relevant and aligned with GEF, but no funding has been confirmed to date.

		FUCSA submitted a funding proposal to strengthen control and surveillance, biological monitoring, community development, sustainable enterprises (scientific tourism, bird watching), communications and marketing. No answer yet.
		CEM submitted funding proposal to the Board of GEF (requested by GEF). No answer yet.
		More funding proposals will be submitted in Yr2 based on priorities identify by partners and through interactions within the stakeholder's forum.
Output 2. Across the seascape, there is increased compliance with regulations and enforcement capacity is enhanced.	2.1 By Dec 2018 30 enforcement personnel have improved knowledge and skills and are sharing relevant information between MPAs.	2.1 Training course developed for the NAVY personnel. First training to be delivered in Yr2. Discussion underway with high ranking official to determine how to incorporate this training in their academic curriculum nationwide.
	2.2 By Sept 2018 >50% of fishing sector stakeholders consider that the fisheries regulations are reasonable and should be complied with.	2.2 to be reported in Yr2.
	2.3 By December 2018 reduction of 50% in level of illegal activities detected relative to intensity of surveillance.	2.3 Co-managers are collecting illegal activity information and first analysis of results will be made in Yr2. Partners are using various means for boat tracking to help reduce illegal activities.
Activity 2.1: Work with the Navy to incorporate a short module on protection of marine resources in their training programmes, and design and deliver a pilot module		With contribution from partners, CEM designed a four-day training course for the NAVY covering topics ranging from biology to economy related to coastal and marine resources, MPA legal framework and law enforcement. In Yr2 a meeting with the Navy high ranking officials to present the plan then discuss and agree how to incorporate it into their academic curriculum as well as run the first training pilot is planned.
Activity 2.2 Establish practice of sharing information between co-managers about fisheries and tourism users of the seascape, including any irregularities such as illegal catches, with a view to identifying risks, preventing infractions, and facilitating detection and prosecution		For sharing information about fisheries: 1) The Fishers Registry System, managed by CEM is being upgraded to help produce monthly reports to be distributed to local stakeholders; 2) Fisheries information has been collected using OurFish and a portal to enable information collection and sharing has been developed. In Yr2 a standard reports will be produced so it can be distributed on a regular basis; and 3) Implementation of the SMART tool that is being tool is being tested by FCC and soon will be implemented by FUCSA. Sharing

		information about tourism is under discussion. Topic will be agreed in Yr2 with input from the stakeholders forum and project partners.
Activity 2.3. Organize the process by which local stakeholders participate in the piloting, evaluation and roll-out of the artisanal vessel tracking system (by Government of Honduras, CEM and Smithsonian), so that its use enjoys broad support and cooperation, especially by fishing cooperatives committed to responsible fishing practices. (Stakeholder support depends on perceptions of the fairness and technical justification for regulations, also addressed by this project)		After a long search, the Smithsonian Institution put together a document summarising the most suitable companies to provide an artisanal vessel tracking system. Discussions are underway to select the best system. CEM will continue participating in discussions and determination of the best new system and once selected, will participate in the pilot roll-out and evaluation.
Activity 2.4. Disseminate widely amongst stakeholders and authorities information about access rights, responsibilities and regulations within the seascape, especially any new or modified regulations that are prepared through this project. In each case, explain reasons, benefits and stakeholder input to formulating the regulations.		FCC shared its experience of preferential access. Managed Access of Belize delivered a training workshop on access rights to partners in Honduras. In CSWR it is not possible to implement such a scheme before the boundaries are approved by the Government. Discussions ongoing.
Activity 2.5. Monitor the effectiveness of control and response to illegal activities and make the results publicly available		Implementation of SMART (Spatial Monitoring and Reporting Tool) tool with support of Wildlife Conservation Society Belize. The tool is already being used in CCMNM and will be implemented in the near future at CSWR. In Yr2 SMART training will be provided and a plan for additional information exchange between partners will be developed.
Output 3. Evidence base for marine conservation and sustainable fisheries management is strengthened, through research and seascape-wide sharing of scientific and traditional knowledge, and is informing seascape management.	3.1 By June 2017 at least 300 stakeholders, across all seascape communities, plus other interested parties, have received new information about ecological connectivity and ecosystem values, relevant to them. 3.2 By March 2018 synthesis of existing and new ecological information available to inform spatial management measures and fisheries management (snapper and estuarine	3.1 Completion in Yr2. 3.2 Synthesis will be completed in Yr2.
	fisheries) referred to in Output 1 above. 3.3 By Sept 2017 a report on bottom	3.3 Compilation document on trawler fishing (industrial activities, by-catch, rules

	trawling impacts and the reasons for eliminating it from the seascape is produced, in collaboration with comanagers and stakeholders, and presented by them to relevant authorities.	and regulations, legislation) for the project area was produced and is currently in review by project partners. This document will be presented to the stakeholder forum to how best to present it to relevant authorities.
	3.4 Two socio-economic, cultural and market studies completed to inform outputs 2 (management) and 5 livelihoods), by Sept 2017 and March 2018.	3.4 Not yet applicable. Will be completed in Yr2.
	3.5 Findings of seascape-wide monitoring, incorporating individual MPA monitoring results, is discussed by the seascape stakeholder forum with co-managers at least three times in the course of the project, by Sept 2017 and Sept 2018 and at EOP.	3.5 To be implemented in Yr2 now that the stakeholder forum has been established and once habitat maps are available.
	3.6 By Sept 2018 co-managers and stakeholder forum agree on a protocol for maintaining and sharing information, plus channels for access by outside parties under principles of open access.	3.6 Draft proposal for the information sharing mechanism developed. It is in the process of validation by partners and to be submitted to CREIA for comments and incorporation within the national mechanism developed by them for monitoring marine and costal ecosystems.
	3.7 Simple, sustainable post-project monitoring system adopted by comanagers and stakeholder forum, by EOP	3.7 Not yet applicable
Activity 3.1 Drawing on the work already of existing data on ecological connectivity be ecosystem: mangroves, estuaries and correefs. This will focus on key habitat for diffimportant for commercial and subsistence	etween key components of the seascape astal lagoons, sea grass beds and coral ferent life cycle stages of species	With the support of the project partners and through an online bibliographic search, more than 260 publications and reports related to seascape ecological connectivity were collected. A database to house this information and make it available amongst partners was created. Methodology data analysis has been

as well as the three flagship species. It will also cover data on fisheries.	agreed upon and the information is currently being analysed.
Activity 3.2 Conduct meetings with fishers and other coastal community members throughout the seascape, to compile complementary traditional knowledge of the same issues.	Information held by projects partners has been collected. Other secondary information about traditional knowledge has been gathered. Some information from communities and local government staff has been collected through field activities implemented by project partners. LARECOTURH and CEM will be leading interviews with focal groups to collect additional socioeconomic information on topics agreed upon during Yr1.
Activity 3.3 Together with co-managers and stakeholders identify and prioritise gaps in the above information, which include detailed habitat mapping, updated status of coastal lagoons and estuaries, mangrove and sea grass (using the modified CARICOMP method), effects of pollution, larval movements and data on yellowtail snapper and other fisheries for Cuero y Salado and Utila	As mentioned in 3.2, information is under analysis and once completed, activities will be prioritised.
Activity 3.4 Undertake research critical for the management purposes summarised under Output 1, i.e. estuary and lagoon management, maintaining critical habitat and connectivity, sustaining subsistence fisheries, conserving threatened species	Methodology to carry out a study of connectivity in parrotfish and yellowtail snapper was developed. Samples of both species are being collected in CSWR, Utila and CCMNM and were sent to the Smithsonian Institution for genetic analysis.
	Marine biological data gathered in Utila to support the establishment of no-take and recovery zones using AGRRA and CARICOMP methodologies. Final report and next steps will be discussed and agreed upon with local fishers.
	Secondary information on the various marine habitats in the seascape have been gathered and analysed. This information has been used to analyse satellite images. Field work utilising 100 validation points has been carried out to calibrate and georeference various types of habitats. Information gathered plus validation points have been sent to the Smithsonian Institution to produce habitat maps for the Honduran North Coast.
	As reported in 1.2, drivers of mangrove loss for Utila and CSWR have been identified and a strategy to tackle them is under development. Basic protocol for mangrove monitoring has been developed and monitoring plots established
Activity 3.5 Study the zoning schemes of the three MPA and other spatial management measures applied in the seascape, and assess how well they collectively serve the needs of the seascape, taking into consideration advances in knowledge of habitats, species, connectivity and resource use	To be implemented in Yr2 after habitat maps are produced (3.4).

Activity 3.6 Analyse ecological and fishery information for yellowtail snapper across the seascape, including size distributions in different locations and the size-reproductive capacity relationship, and produce recommendations for improving management of this resource	As reported in 1.7, a synthesis report on the yellowtail snapper fishery was written. Reports on harvest using the OurFish application were produced for APROCUS members. Initial recommendation for management will be produced in Yr2.
Activity 3.7 Use global information on bottom trawling impacts and local experience of excluding bottom trawling from MPA's to characterise the potential benefits of eliminating that fishing method from the whole seascape	Using information from DIGEPESCA on tracking of industrial fishing vessels and in collaboration with CEM, the Smithsonian Institution and the University of Queensland, an analysis was carried out to determine trawler movements in order to understand fishing effort and activity locations. Maps produced specifically for the project area did not show a significant threat of trawling in the area, although some incidents of trawling occurred in a community of the CSWR. With the information about industrial trawling, plus the analysis of approximately 100 bibliographic sources, a trawling compilation document for the project area was produced and is currently under review and validation by project partners. This document will be presented to the stakeholder forum to agree on presentation to relevant authorities. It is important to note that the new fishing law has not been approved by the Government so it is not known if there are resolutions included about trawling.
Activity 3.8 Prepare and disseminate a technical publication about ecological connectivity in the seascape, together with a popular summary version, and present it in community meetings	To be implemented in Yr2.
Activity 3.9 Prepare and provide to the MPA co-managers and the stakeholder forum technical reports, incorporating scientific and traditional knowledge, to inform their discussions on the themes listed under Output 1 and others requested by the forum	To be implemented in Yr2.
Activity 3.10 Undertake two socio-economic, cultural and market studies needed to support the sustainable livelihood initiatives to be identified under Output 5.	To be implemented in Yr2.
Activity 3.11 Agree between co-managers and seascape stakeholders a protocol for managing seascape information to facilitate open access for all actors, and for interested outside parties. In principle, this will formalise within-seascape practices developed through this project, and in addition use the partners' institutional information systems and regional or thematic portal(s) that are already functioning (e.g. Healthy Reefs). Periodically review and update the protocol	CREIA (Documentation and Environmental Interpretation Centre) is already working on a national information system for monitoring of coastal and marine ecosystems. This work is currently funded by GEF. CEM has been meeting with CREIA's director to learn about the system and developed a proposal to incorporate the Darwin seascape information management protocol at the national level. The protocol is being reviewed and ratified by project partners. Once validated, it will be presented to CREIA to fine-tune the methodology, agree upon its incorporation in the national system, define responsibilities and

		determine next steps for implementation.
Activity3.12 Design, in consultation with N simple, low-cost seascape-wide participa individual MPA systems and focuses on e fisheries resources, mangroves). This will app OurFish, which is a catch monitoring cooperatives. The project will support initimonitoring.	tory monitoring system, which builds on elements of joint interest (e.g. shared I include CEM-led trials of the Android tool for use by fish buyers and	OurFish will be used widely with organisations and fishers to collect fisheries monitoring data. CEM will work with stakeholders in Yr2 to create a digital communication plan
Output 4. The principal seascape stakeholders have enhanced social capital, with a forum and networks for cooperation on participatory marine management, fisheries, ecotourism and other priority development issues which they may identify.	 4.1 By Dec 2016 the forum is set up and equitably representing the stakeholders who depend directly on the seascape; aim to reach 30% female representation. 4.2 Forum is sharing information by March 2017 and by June 2017 is producing joint resolutions and contributing to development of the management measures described under Output 1. 	 4.1 The stakeholder forum has been established, with the initial participation of 15 communities. Within the forum, a coordination committee was established which currently has 28% female participation. MICMC helped strengthen community participation in the forum, forming in July 2016 and helping prepare communities to participate in the March forum meeting. 4.2 The forum was established in March 2017. Information sharing will take place Q1 Yr2 and continue thereafter on a regular basis.
	4.3 By Dec 2017, two action plans adopted by the stakeholder forum in relation to their shared interests in sustainable fisheries and ecotourism, with women's concerns incorporated.	4.3 To be implemented in Yr2.
	4.4Three funding proposals developed based on seascape stakeholder agreements, by March 2018.	4.4 To be implemented in Yr2.
	4.5 MPA access and regulations harmonised across the seascape by Sept 2018, including inter-community agreements on shared fishing	4.5 to be implemented in Yr2.

	grounds.	
	4.6 By EOP the stakeholders consider that the forum and associated networks and external links bring significant benefits that justify their investment of time and effort (transaction costs).	4.6 To be monitored from Yr2 and to have final results by EOP.
Activity 4.1 Building on LARECOTURH's group on mangrove conservation, bring t stakeholders, principally those dependent ecotourism ventures, from the user commutial community in BIMNP. Facilitate and interest (and in certain cases, tension or ecosystem and its uses and values, and and food security and reduced vulnerabil steps, including the establishment of a recomplemented by working groups and probetween communities on specific themes	ogether MPA co-managers and marine at on artisanal fisheries or small-scale nunities of CSWR and CCMNM and the event to identify themes of common conflict) in relation to the marine their aspirations for improved livelihoods ity. Agree and implement follow-up egular, seascape-wide forum, rocesses for dialogue and cooperation	Through the strengthening of MICMC, RECOTURH has helped strengthen community participation so they can actively participate in the forum.
Activity 4.2 Support and facilitate the furth forum and associated sub-groups and pribasic guiding documents, then joint action management (output 1), livelihood opport they may identify.	ocesses, including the production of negative new plans around the themes of marine	LARECOTURH supported the establishment of the stakeholder forum. The participation is still low will build through time as partners become more active in the forum. Development of a short-term action plan is underway following development of a strategic plan. Funding and leadership constraints have hindered further development of the forum, but partners will work to overcome these hurdles during Yr2.
Activity 4.3 Support processes of feedback forum/working groups and the stakeholder anticipated that the forum will have format amongst stakeholders as a space for deback.	er groups to which they pertain. It is not all power, nevertheless its legitimacy	This activity will start in Yr2.
Activity 4.4 Expand the prior work of LAR groups of ecotourism service providers a in the tourism industry, who already bring	nd fish suppliers with potential partners	This activity will start in Yr2.
Activity 4.5 Support the development of particular stakeholders to obtain financial and technology.	. , , , , , , , , , , , , , , , , , , ,	Three proposals were developed and submitted by stakeholders to Interamerican Foundation, GEF and Green Grant. None of them have been approved to date.

prioritise, and enable them to present the Program and other sources	se proposals to UNDP Small Grants	More proposals will be developed in Yr2
Activity 4.6 Facilitate discussion within the which are being introduced in each of the for improved management, and resolution fishing grounds midway between CSWR and their use in the seascape to inform the agreements on access rights. Use this or the introduction of access rights across the identify and safeguard the interests of vulneration.	three MPAs, and identify opportunities of actual or potential conflicts (e.g. and Utila). Use spatial data on resources described by the description of actual or potential data on resources described by the description of the description of the whole seascape, taking care to	This activity will start in Yr2.
Activity 4.7 Facilitate discussion within the regulations in the three MPAs and identification order to improve management and prome seascape	y opportunities for harmonisation, in	This activity will start in Yr2.
Activity 4.8 Maintain records of the work of incorporate in the process periodic feedby forum is effective in serving the needs of	ack from participants to ensure that the	This activity will start in Yr2.
Output 5. 150 community members, who depend directly on the seascape, have enhanced human capital and are empowered to access and sustainably manage fisheries and strengthen economic enterprises.	5.1 By Sept 2018, 150 people, including at least 30% women and individuals from groups identified as vulnerable, are trained to participate in marine governance and management.	5.1 APROCUS capacity has greatly increased through increased involvement of women, and improvements in the capture and marketing their products. Community leaders have been trained using governance and conflict resolution tools enabling a clearer vision regarding access rights.
	5.2 By June 2018, at each MPA processes for participation by local stakeholders in governance are strengthened.	5.2 Collaboration agreement under development so APROCUS can contribute to CSWR management. Processes of analysis of participation will continue through Yr2
	5.3 Registration of local fishers, confirming their access rights, is completed at the three MPAs by March 2018.	5.3 Fishers registry is almost completed in CSWR. It will be completed during Yr2 in CCMNM and Utila. FUCSA will continue following up the approval of the new boundaries of CSWR to progress with access rights.
	5.4 By EOP, sustainable fisheries or ecotourism-related enterprises are	5.4 Two fisher's associations strengthened <i>vis-à-vis</i> development of project profiles/simple funding proposals. One fisher's association with 40% women

	developed, or existing enterprises improved, benefitting people in at least six communities, with emphasis on women and vulnerable groups.	representation in its Board of Directors and the positions of president and vice- president fulfilled by women
	5.5 One international learning visit conducted to a community-based sustainable fisheries project (Kanan Kay, Mexico), by March 2017.	5.5 Needed to be reprogrammed and will be carried out in Q1 Yr2.
	5.6 Case study published on the value of artisanal fisheries and the empowerment of coastal communities, by EOP.	5.6 To be implemented in Yr3.
Activity 5.1. Amongst the community mer resources, identify sub-groups or individu because of heavy dependence on subsist decision-making or gender-related factor training and empowerment processes.	als who are especially vulnerable e.g. tence fisheries, marginalisation from	FFI webinar for partners delivered on the livelihoods framework and the concept of vulnerability, as a basis for future identification of priority groups for support.
Activity 5.2 Complete registration of fishers with access rights to CCMNM and CSWR respectively, and of Utila fishers.		Registration of artisanal fishers in CSWR completed by FUCSA and CEM. CEM provided technical support to design and produce the identification card and to implement registry in the field. Co-managers have access to the registry to support control and surveillance activities and foster interactions with fishers. A final round of registration will take place in April to include the last community not yet registered (Boca Cerrada).
		With regards to Utila fishers, the registration system was discussed with comanagers. It was decided that in August when fishing licences are renewed, they will carry out the resident fisher's registration.
		For CCMNM, the design of the licence is under revision by co-managers and once approved, CEM will support the registration process in the field.
Activity 5.3. Continue strengthening the Cand expanding the role of women in it.	CSWR fishing cooperative, APROCUS,	Co-management agreement is under development between FUCSA and ICF. It was determined that APROCUS does not fulfil all requirements to be a co-manager, therefore a collaboration agreement will be signed between APROCUS & ICF to integrate with their CSWR management.

	Capacity was created in APROCUS: developing the project profiles and creating of simple funding proposals and management and input in the OurFish app. Two proposal were written, one of them being approved for office equipment. Information for OurFish is recorded by the fisher which is downloaded to CEM's servers. Ultimately DIGEPESCA will manage app and its data.
	Currently all work with fishers has been coordinated by FUCSA and APROCUS. During the governance workshop (5.6), APROCUS requested recognition of artisanal fishing by the Honduran Government to alleviate poverty while conserving natural resources. CEM has been supporting regular meetings to evaluate advances in their 2014-2018 strategic plan.
	APROCUS elected their new Board of Directors. More than 40% of the positions were filled by women including the president and vice-president of the Board.
Activity 5.4 Use the successful experience of APROCUS to inspire and guide strengthening of other fishers' organisations associated with Utila and CCMNM, and to strengthen the systems and structures for participatory governance, especially of CCMNM, as envisaged in the 2014-25 management plan. This will strengthening the Community Commission and increasing the role of women and vulnerable groups within it	Stakeholder mapping carried out for CSWR and Utila. Work carried with the Cayitos Fishers Association for declaration of the no fishing zone, monitoring of fishers, work to create seasonal closures, biological baseline started and management of shared fisheries.
Activity 5.5 As part of the above, design and implement a series of training events related to the strengthening of internal organisation, representation, negotiation and conflict management. APROCUS leaders will be involved in sharing their experiences and delivering elements of the training, alongside project partners.	APROCUS training reported in 5.3. Some training necessities identified such as management of collection centres. Identification of youth that can serve as local technical promoters.
Activity 5.6 Provide training on participatory governance for staff of co-managers and relevant authorities, to enable them to manage better and benefit from the participatory systems	Governance workshop delivered to project stakeholders
Activity 5.7 Organize a visit to learn from fishers, NGOs and authorities involved in the Kanan Kay Alliance, Mexico. A minimum of 4 people will travel, including 3 fishers, but we aim to expand the group by finding additional funds and contributions in kind. Undertake post-visit events and informal feedback to relay experiences and ideas.	The visit was organised and planned for March 2017 but Kanan Kay Alliance had some last-minute issues with the meetings and exchange agenda so it was necessary to reprogramme it for Q1 of Yr2. Six people will be taking part of the visit. In Yr2 also post-visit activities will be implemented to further enable cross-learning.
Activity 5.8 Through strategic planning exercises, plus exchange of ideas between the user groups, assist the groups to identify priority livelihood development aims and develop action plans. Where possible, connect the community groups with relevant buyers, collaborators or sources of technical	This activity will start in Yr2.

assistance and funding e.g. UNDP Small Grants Program	
Activity 5.9 For a few selected livelihoods initiatives linked to marine resources (e.g. fisheries, blue crab fishery at Utila, provision of goods and services to tourism industry) and involving women or vulnerable groups, provide technical assistance, market research, business planning advice and/or other small-scale inputs. Where appropriate, develop funding proposals involving the local entrepreneurs and one or more project partners to expand these initiatives	As a contribution to existing livelihoods activities, the business capacity of the three groups that are part of APROCUS have been strengthened through the improvement of the collection centres of Boca Cerrada and Salado Barra and access to an area to commercialise their catch directly. The actual implementation of selected livelihoods initiatives will be done in Yr3.
Activity 5.10 Prepare and publish a case study and present it in at least one regional event	To be implemented in Yr3.

16. Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact:			
The Honduran section of Mesoamerican I enjoy improved livelihoods and food secu	•	cies are protected and sustainably managed	I, while participating coastal communities
Outcome: Integrated, collaborative management established across an 800,000-hectare seascape, encompassing 3 MPA's, thereby protecting critical habitats and species, making fisheries more sustainable, and improving livelihoods and food security of 1000 people	0.1 20 ha of mangrove restored and 200 ha with improved protection by EOP.	0.1 Baseline and historical distribution and status derived respective MPA management plans and publications they refer to, updated with field observations and photo records. Progress verified by co-manager records of protection measures (delimitation, elimination of alien species), photo records and local interviews.	We assume that government and comanagers continue the policy of strengthening community participation in MPA governance. Current evidence supports this assumption (e.g. decision to review management plans with local stakeholders). We assume that if authorities, co-
	0.2 In CSWR estuary at least one major source of sediment and pollutants has modified practices, reducing nearshore turbidity by EOP.	0.2 Records of field visits to observe and sample source of sediment/pollution. Verification by before/after measurements of turbidity/pollution levels, using standard water quality methods, in estuaries and adjacent sea	managers and stakeholders perceive benefits from seascape-wide networking and cooperation, they will continue and consolidate the practice. We will monitor these perceptions during the project.
	0.3 At CSWR estuary and Laguna de Cacao (CCMNM) harmful fishing practices have been reduced by 20% by EOP.	grass. 0.3 Results of community-led fisheries monitoring; focus group discussions and direct observation of fishing practices and of species/size distribution in catches.	For each of the three flagship species there are known threats, which can be mitigated through increased public engagement. Existing baseline data will be compiled in Q1 to enable quantitative monitoring.
	0.4 By EOP measures are implemented to reverse decline of CPUE and mean size of yellowtail snapper (<i>Ocyurus chrysurus</i>), with systems to monitor that trend, and plans to extend the same approach to other seascape fisheries.	0.4 MPA regulations and procedures documented by co-managers and verified by focus groups. Reports analysing catch data collected at landing stations with local fishers and traders using OurFish app where appropriate. Manual for	We expect to be able to report continuing post-project improvements in species populations, ecosystem status, fish populations and catches, and livelihoods beyond EOP (see section 19 on sustainability). In particular, post-

0.5 By EOP, bottom trawling within seascape reduced to <5 incidents per year, of which at least 50% are followed up by authorities.

0.6 By EOP, threats to hawksbill turtle, Utila iguana and manatee are reduced through increased public commitment and participation in protection and monitoring

0.7 Livelihoods

0.7a Fishing or ecotourism-related livelihoods: By EOP, at least 100 households have increased their income from marine resources by at least 15% relative to SOP baseline by increasing the value of fisheries products and/or increasing income from provision of goods and services to the tourism industry.

0.7b Inclusion and empowerment: (i) at least 80 fishers by project mid-point and 200 fishers by EOP have officially recognised fisheries access rights (ii) by EOP, in 70% of seascape villages the primary stakeholders report substantially

ongoing participatory monitoring.

0.5 Local fishers' reports to project partners on observed incidents and action taken.

0.6 For hawksbill, FCC records on nesting beach protection by volunteers and reports on by-catch within the seascape. For iguana, FIB records on population, mangrove habitat (see 0.1 above) and reports of hunting. For manatee, seascape-wide data on population distribution and habitat use, to be held by FUCSA. Baseline status and quantitative targets to be set in working group session in Q1

Baseline and EOP surveys, including gender-specific questions, of men and women engaging with the project on livelihoods training/technical support

- (i) Fisheries registration database and permits, carried by fishers, which specify the "home" MPA, to which they have rights of access.
- (ii) Focus group discussions with a representative sample of primary

project monitoring should reveal improvements in status of mangroves, estuary and lagoon water quality and fisheries, snapper populations and catches, and status of the Utila iguana Status of turtle and manatee may improve more slowly and, especially in the case of turtles, be more dependent on events outside the project area. We expect coral reefs to benefit from the ecosystem improvements, and that this would be reflected in improvements in the "Healthy Reefs" report card for the Mesoamerican reef against their 2015 baseline.

We assume that the direct improvements obtained by 250 community members - fishers and other vulnerable groups - will benefit their households i.e. about 1000-1250 people in total. This will be tested by the monitoring data and EOP evaluation.

Quantitative income indicators assume reasonable degree of success in enabling community groups to obtain additional funding for livelihood initiatives from other sources i.e. activities 5.8 and 5.9.

stronger influence on MPA management	stakeholders in each of at least seven
decisions than before the project.	villages. Most participants will be (predominantly male) fishers but we will also hold separate FGDs with women
	and men involved in fish processing and
	marketing, and in (eco)tourism service
	provision.
0.7c Cooperation with other	
stakeholders: (i) By EOP the seascape	Records of forum meetings and
stakeholder forum has achieved	subsequent progress reports on agreed actions.
consensus on actions to address at least 2 major fisheries issues (1 by project	Reports by MPA co-management NGOs
mid-point) and at least 1 external threat	(FUCSA, FIB, CCF).
to the seascape which impact the	Focus group discussions with
livelihoods of marginalized fishing	stakeholders in at least seven villages, as
communities (ii) By EOP there has been a 50%	a representative sample. Most participants will be fishers but the groups
reduction in incidences of conflict over	will also include women and men
fisheries and marine resources.	involved in fish processing and
	marketing, and in ecotourism service
	provision.
0.7d Food security: By EOP, at least 80	EOP surveys of women and men from
low income households able to meet	poorer households to assess levels of
household food requirements during periods of unfavourable weather without	food insecurity.
resorting to unsustainable harvesting of	
juvenile marine organisms	
0.7e Marine resource status: By EOP,	EOP survey of women and men in
at least 60% of women and 60% of men	seascape communities, triangulated with
report that the project has contributed to	information gained from inclusion of this
improvements in the health and	topic in focus group discussions and in
sustainability of the marine resources on	the participatory EOP evaluation, as well

which they depend

as ecological and fisheries data under

Output 3.

Output 1

- 1. Across the seascape, management of key fisheries, habitats and species are strengthened through coordinated planning and action.
- 1.1 Spatial management priorities for seascape agreed amongst stakeholders and co-managers by Sept 2018 and 3 or more measures benefitting fisheries under implementation by EOP.

- 1.2 Habitat conservation measures agreed and adopted by seascape stakeholders, co-managers and authorities: (i) mangrove protection/ restoration, (ii) elimination of bottom trawling, (iii) sediment and pollutant reduction by commercial agriculture at estuaries, (iv) management measures for fisheries in estuaries and coastal lagoons, (v) other measures tbd with stakeholders. At least 1 of these by December 2016, 3 by December 2017, 4 by EOP.
- 1.3 Seascape-wide yellowtail snapper (*Ocyurus chrysurus*) fishery management and monitoring plan agreed and adopted by December 2017 and in implementation by March 2018.

- 1.1 Document analyzing current spatial management from integrated seascape management perspective. Records of stakeholder forum and co-manager discussions and agreements. MPA co-manager activity reports of measures, such as additional protection for zones with critical connectivity function, seasonal closures in certain zones, fishing quota distribution etc.
- 1.2 Records of stakeholder forum and individual MPA participatory management meetings between co- managers, stakeholders and scientists. Authority resolutions where relevant. Public dissemination materials about measures. Co-manager progress reports. Project Steering Group presentation to stakeholder forum and feedback received.
- 1.3 Records of stakeholder forum and individual MPA participatory management meetings between co- managers, stakeholders and scientists. Authority resolutions where relevant. Public dissemination materials about measures. Co-manager progress reports. Project Steering Group presentation to stakeholder forum and feedback received.
- 1.4 Project partner records of people

Habitat measures would be developed through participatory governance mechanisms involving MPA comanagers and stakeholder groups. We assume that they would confirm most or all of these themes as but are open to the possibility that they may bring one or more additional priorities to the table.

We assume the oil palm managers will continue to be open to dialogue with stakeholders and authorities about reducing proven impacts of their operations.

We assume that the NGO comanagers of the three MPAs will broadly maintain their current levels of management capacity and operating revenue, as they intend to do (as a minimum). Thus, the improvements through this Darwin project will be incremental, leveraging existing capacities and facilitating additional fund-raising.

The agreed priority management measures will be initiated through this project, to achieve EOP aims, and comanagers will continue the activities beyond the project. All parties will cooperate with efforts to secure additional funding in order to accelerate the pace and scope of implementation during and after the project (see activity 1.9). There is

	1.4 Numbers of people and institutions engaged actively in conservation and monitoring of manatee, hawksbill turtle and Utila iguana increased by 30% by March 2017 and 60% by EOP.	signing up as volunteers (e.g. iguana nest protection, iguana protection), or providing monitoring data, reporting incidents, doing conservation education etc. Data on public action will be disaggregated by age groups as well as gender. Baseline tbd in Q1.	much scope in the GEF project, well beyond what we have counted on for budgeting purposes (see letter from GEF project leader).
Output 2 2. Across the seascape, there is increased compliance with regulations and enforcement capacity is enhanced.	2.1 By Dec 2018 30 enforcement personnel have improved knowledge and skills and are sharing relevant information between MPAs. 2.2 By Sept 2018 >50% of fishing sector stakeholders consider that the fisheries regulations are reasonable and should be complied with.	2.1 Training records, post-training evaluation, follow-up interviews to assess use of learning and sharing of information. 2.2 Survey data and focus group discussions. CCMNM has detailed studies of fisher opinions about regulations, zoning and their economic needs. The project will use this as the basis for monitoring willingness to comply and feasibility of compliance, from the perspective of fishers and other stakeholders.	We assume that, as affirmed in CEM's letter of support, CEM, the Smithsonian Institution and the Government of Honduras will continue with the roll-out of the surveillance, monitoring and fisher security system, using "Pelagic Data Systems" technology, which is currently being piloted in four locations, including CSWR and Utila (see flyer). Our project's role is thus to complement the new technological tool with activities to build Navy personnel capacity and to increase the social acceptability of regulations through stakeholder participation in their
	2.3 By December 2018 reduction of 50% in level of illegal activities detected relative to intensity of surveillance.	2.3 Records maintained by Navy, CEM, co-management NGOs and communities. These will be complemented by minutes of periodic meetings with Navy, co-manager, fishing cooperative and tour-operator groups to verify that all consider the reduced detection reflects real increase in compliance rather than inefficiency or corruption. Baseline data are available for each MPA but need to be harmonised and the precise common indicators defined in Q1.	formulation, affirmation of access rights and use of monitoring data on both the effectiveness of control and resource trends. As mentioned in CEM's letter, we assume that the Government will continue its determined efforts at national level to establish effective control of marine activities, which have already delivered significant results. We assume that empowerment, especially secure resource access and increased involvement in generating and debating information for

			management decisions, will increase willingness to comply. However, perceptions of the feasibility of compliance will depend on progress on improving livelihoods, so there is an iterative process of improving compliance and livelihoods in tandem.
Output 3 3. Evidence base for marine conservation and sustainable fisheries management is strengthened, through research and seascape-wide sharing of scientific and traditional knowledge, and is informing seascape management.	3.1 By June 2017 at least 300 stakeholders, across all seascape communities, plus other interested parties, have received new information about ecological connectivity and ecosystem values, relevant to them. 3.2 By March 2018 synthesis of existing and new ecological information available to inform spatial management measures and fisheries management (snapper and estuarine fisheries) referred to in Output 1 above.	3.1 Publication, prepared in collaboration with co-managers and stakeholders, and audience-specific materials derived from it. Records of distribution and presentation at meetings. 3.2 Research reports. Products of meetings with fishers to incorporate traditional knowledge. Reports of meetings between MPA co-managers, stakeholders and project personnel on sharing information. Documents synthesising information from sources across the seascape. Presentations.	We assume Government will be open to dialogue about restrictions on bottom trawling and other destructive fishing practices. The bottom trawling is already infrequent, and is prohibited within the MPAs but not seascapewide. However, recent legislation relaxes restrictions and it is important to counteract initiatives to revitalise the industry and expand its activities. We assume Government, co-managers and communities will be willing to use evidence based on scientific and traditional knowledge to support new conservation and livelihood measures.
	3.3 By Sept 2017 a report on bottom trawling impacts and the reasons for eliminating it from the seascape is produced, in collaboration with comanagers and stakeholders, and presented by them to relevant authorities.	3.3 The report and records of response from authorities (statements and actions).	
	3.4 Two socio-economic, cultural and market studies completed to inform outputs 2 (management) and 5 livelihoods), by Sept 2017 and March 2018.	3.4 Study reports and documents showing their use by co-managers and community groups respectively.	

	3.5 Findings of seascape-wide monitoring, incorporating individual MPA monitoring results, is discussed by the seascape stakeholder forum with comanagers at least three times in the course of the project, by Sept 2017 and Sept 2018 and at EOP.	3.5 Documents and presentations provided to the forum	
	3.6 By Sept 2018 co-managers and stakeholder forum agree a protocol for maintaining and sharing information, plus channels for access by outside parties under principles of open access.	3.6 Signed agreement. Records of access to information by seascape actors and by external parties. Verifiable by direct experience of access.	
	3.7 Simple, sustainable post-project monitoring system adopted by comanagers and stakeholder forum, by EOP	3.7 Document describing monitoring system, with records of meeting agreeing to apply it. Relevant data on EOP status	
Output 4 4. The principal seascape stakeholders have enhanced social capital, with a forum and networks for cooperation on portion to the province management.	4.1 By Dec 2016 the forum is set up and equitably representing the stakeholders who depend directly on the seascape; aim to reach 30% female representation.	4.1 Records of community meetings. Minutes of first forum meeting. Correspondence with stakeholder groups.	We assume co-managers are willing and interested in aligning and developing joint regulations and marine management plans.
participatory marine management, fisheries, ecotourism and other priority development issues which they may identify.	4.2 Forum is sharing information by March 2017 and by June 2017 is producing joint resolutions and contributing to development of the management measures described under Output 1.	4.2 Records of forum meetings. Statements by the forum and by member groups about the management measures. Verify through interviews and focus groups at EOP.	We assume that, with good preparation and expert facilitation, any barriers to networking between coastal communities can be overcome. Regarding barriers to participation by
	4.3 By Dec 2017, two action plans adopted by the stakeholder forum in relation to their shared interests in sustainable fisheries and ecotourism, with women's concerns incorporated.	4.3 Records of forum meetings. Subsequent progress reports on action plan implementation.	women and vulnerable groups, our experience with the fishers' cooperative APROCUS has been positive (e.g. 3/9 board members are women). Regarding cultural barriers, 7 of the 18 villages have Garifuna people, who have a distinct culture but similar fishing practices and poverty levels.
	4.4 Three funding proposals developed	4.4 Funding proposals and records of	

	on the basis of seascape stakeholder agreements, by March 2018.	their submission to potential donors.	Hitherto we have not encountered barriers to dialogue, but will be
	4.5 MPA access and regulations harmonised across the seascape by	4.5 Published regulations. Agreements between co-managers and authorities.	sensitive to that and to the positive reinforcement of cultural traditions.
	Sept 2018, including inter-community agreements on shared fishing grounds.	Minutes of forum meetings and of facilitated inter-community negotiations.	We assume that donors will be interested in community proposals developed through this process.
	4.6 By EOP the stakeholders consider that the forum and associated networks and external links bring significant benefits that justify their investment of time and effort (transaction costs).	4.6 Focus groups and interviews with stakeholders, including the Most Significant Change methodology.	Evidence is provided by the letter from the UNDP Small Grants Program, confirming their intention to cooperate with the project.
Output 5 5. 150 community members, who depend directly on the seascape, have enhanced human capital and are empowered to access and sustainably	5.1 By Sept 2018, 150 people, including at least 30% women and individuals from groups identified as vulnerable, are trained to participate in marine governance and management.	5.1 Training records, post-training evaluation, recorded follow-up interviews to assess use of learning, meeting minutes and attendance lists.	We assume that coastal communities will be willing to invest the time necessary for effective participation. Experience suggests that they will if they truly influence decisions.
manage fisheries and strengthen economic enterprises.	5.2 By June 2018, at each MPA processes for participation by local stakeholders in governance are strengthened.	5.2 Signed agreements between co- managers and stakeholder groups, including resolution of areas of tension or conflict. Records of meetings and actions taken in fulfilment of the agreements.	We assume that fisheries access rights system can be readily adapted to local context and needs. We assume that coastal communities
	5.3 Registration of local fishers, confirming their access rights, is completed at the three MPAs by March 2018.	5.3 Registration database. Credentials issued to fishers.	will have sufficient commitment to develop the capacities needed for improved fisheries-related livelihoods and for improved or new enterprises linked to the tourism market in this part of Honduras.
	5.4 By EOP, sustainable fisheries or ecotourism-related enterprises are developed, or existing enterprises improved, benefitting people in at least six communities, with emphasis on women and vulnerable groups.	5.4 Written and photographic records of enterprises and interviews with people participating in them.	We assume that existing tourism volumes in this part of Honduras will be maintained, as recent trends indicate, so that there continues to be scope for small, ecotourism-related enterprises.

5.5 One international learning visit	5.5 Visit agenda and report. Follow-up	We assume that food insecurity is
conducted to a community-based	interviews on use of lessons learned.	caused largely by limited capacity to
sustainable fisheries project (Kanan Kay		access resources, low income from
Mexico), by March 2017.		fishing, high dependence on fishing
		and declining fish stocks in estuarine
5.6 Case study published on the value of	5.6 Published case study and associated	and nearshore areas.
artisanal fisheries and the empowerment	conference presentations and media	
of coastal communities, by EOP.	coverage.	

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

- 1.1 Discuss the findings of the spatial management assessment (see output 3) amongst the MPA co-managers and with the stakeholder forum, and facilitate agreement on consequent management decisions and actions in individual MPAs, the unprotected area or seascape-wide. Support initial implementation of priority new measures.
- 1.2 Support implementation of priority mangrove conservation activities in the seascape, including removal of introduced African Oil Palm, restoration by local groups (predominantly women), and demarcation of boundaries to curb cutting and livestock incursions
- 1.3 Present the assessment of bottom trawling impacts (see output 3) to the MPA co-managers and the stakeholder forum for discussion and decisions on a proposal to government on policy and actions. Support preparation and presentation of this proposal by stakeholders and co-managers to government.
- 1.4 Present to the MPA co-managers, the stakeholder forum, municipal authorities and agricultural stakeholders the assessment of seascape estuaries and coastal lagoons, including their role in sustaining marine and brackish water fish populations, their connectivity with sea grass beds and reefs, their pollution (including oil palm waste) and sediment problems, and their use by women and men for subsistence fisheries.
- 1.5 Facilitate the development of affordable action plans for estuaries/lagoons, which would include measures by plantations to reduce pollution and sediment and monitor changes, and promote its implementation in priority sites (CSWR estuary, Cacao lagoon).
- 1.6 Work with local users, principally subsistence fishers but also commercial fishers and tourism users, to understand the multi-species fisheries in estuaries and lagoons and their inter-dependence with marine fish populations. Develop community action plans to improve fisheries and make them more sustainable fisheries, with emphasis on subsistence fisheries by vulnerable groups and use of inshore areas in periods when weather prevents ocean fishing. Contribute technical support to implementation and participatory monitoring.
- 1.7 Present the findings of the yellowtail snapper studies (see output 3) to the MPA co-managers and the stakeholder forum, to discuss and decide actions to improve the management and sustainable use of the resource, as well as potential implications for other fisheries in the seascape. Contribute technical support to implementation and participatory monitoring.
- 1.8 Enable NGO lead agency for each flagship species to present species status and action plans to stakeholder forum, where actions to enhance custodianship and stimulate participation by seascape users will be agreed. Provide small-scale support to actions by stakeholders to reduce threats (by-catch, collisions, killing for consumption, habitat degradation).
- 1.9 Collaborate on the development of funding proposals for further implementation and expansion of the seascape management activities developed under this

project.

- 2.1 Work with the Navy to incorporate a short module on protection of marine resources in their training programmes, and design and deliver a pilot module.
- 2.2 Establish practice of sharing information between co-managers about fisheries and tourism users of the seascape, including any irregularities such as illegal catches, with a view to identifying risks, preventing infractions, and facilitating detection and prosecution.
- Organize the process by which local stakeholders participate in the piloting, evaluation and roll-out of the artisanal vessel tracking system (by Government of Honduras, CEM and Smithsonian), so that its use enjoys broad support and cooperation, especially by fishing cooperatives committed to responsible fishing practices. (Stakeholder support depends on perceptions of the fairness and technical justification for regulations, also addressed by this project).
- 2.4 Disseminate widely amongst stakeholders and authorities information about access rights, responsibilities and regulations within the seascape, especially any new or modified regulations that are prepared through this project. In each case, explain reasons, benefits and stakeholder input to formulating the regulations.
- 2.5 Monitor the effectiveness of control and response to illegal activities and make the results publicly available.
- 3.1 Drawing on the work already done (see M&E section below), review existing data on ecological connectivity between key components of the seascape ecosystem: mangroves, estuaries and coastal lagoons, sea grass beds and coral reefs. This will focus on key habitat for different life cycle stages of species important for commercial and subsistence fisheries (marine and brackish water), as well as the three flagship species. It will also cover data on fisheries.
- 3.2 Conduct meetings with fishers and other coastal community members throughout the seascape, to compile complementary traditional knowledge of the same issues.
- 3.3 Together with co-managers and stakeholders identify and prioritise gaps in the above information, which include detailed habitat mapping, updated status of coastal lagoons and estuaries, mangrove and sea grass (using modified CARICOMP method http://biogeodb.stri.si.edu/physical_monitoring/downloads/caricomp_manual_2001.pdf), effects of pollution, larval movements and data on yellowtail snapper and other fisheries for Cuero y Salado and Utila.
- 3.4 Undertake research critical for the management purposes summarised under Output 1, i.e. estuary and lagoon management, maintaining critical habitat and connectivity, sustaining subsistence fisheries, conserving threatened species.
- 3.5 Study the zoning schemes of the three MPA and other spatial management measures applied in the seascape, and assess how well they collectively serve the needs of the seascape, taking into consideration advances in knowledge of habitats, species, connectivity and resource use.
- 3.6 Analyse ecological and fishery information for yellowtail snapper across the seascape, including size distributions in different locations and the size-reproductive capacity relationship, and produce recommendations for improving management of this resource.
- 3.7 Use global information on bottom trawling impacts and local experience of excluding bottom trawling from MPA's to characterise the potential benefits of eliminating that fishing method from the whole seascape.
- Prepare and disseminate a technical publication about ecological connectivity in the seascape, together with a popular summary version, and present it in community meetings.
- 3.9 Prepare and provide to the MPA co-managers and the stakeholder forum technical reports, incorporating scientific and traditional knowledge, to inform their

discussions on the themes listed under Output 1 and others requested by the forum.

- 3.10 Undertake two socio-economic, cultural and market studies needed to support the sustainable livelihood initiatives to be identified under Output 5.
- 3.11 Agree between co-managers and seascape stakeholders a protocol for managing seascape information to facilitate open access for all actors, and for interested outside parties. In principle, this will formalise within-seascape practices developed through this project, and in addition use the partners' institutional information systems and regional or thematic portal(s) that are already functioning (e.g. Healthy Reefs). Periodically review and update the protocol.
- 3.12 Design, in consultation with MPA co-managers and stakeholder, a simple, low-cost seascape-wide participatory monitoring system, which builds on individual MPA systems and focuses on elements of joint interest (e.g. shared fisheries resources, mangroves). This will include CEM-led trials of the Android app OurFish, which is a catch monitoring tool for use by fish buyers and cooperatives. The project will support initial implementation of the participatory monitoring.
- 4.1 Building on LARECOTURH's work to mobilise a multi-community group on mangrove conservation, bring together MPA co-managers and marine stakeholders, principally those dependent on artisanal fisheries or small-scale ecotourism ventures, from the user communities of CSWR and CCMNM and the Utila Cayo community of BIMNP. Facilitate an event to identify themes of common interest (and in certain cases, tension or conflict) in relation to the marine ecosystem and its uses and values, and their aspirations for improved livelihoods and food security and reduced vulnerability. Agree and implement follow-up steps, including the establishment of a regular, seascape-wide forum, complemented by working groups and processes for dialogue and cooperation between communities on specific themes.
- 4.2 Support and facilitate the further development and operation of the forum and associated sub-groups and processes, including the production of basic guiding documents, then joint action plans around the themes of marine management (output 1), livelihood opportunities (output 5) and other topics which they may identify.
- 4.3 Support processes of feedback between representatives in the forum/working groups and the stakeholder groups to which they pertain. It is not anticipated that the forum will have formal power, nevertheless its legitimacy amongst stakeholders as a space for debate of important issues is crucial.
- 4.4 Expand the prior work of LARECOTURH in connecting community groups of ecotourism service providers and fish suppliers with potential partners in the tourism industry, who already bring clients to the area.
- 4.5 Support the development of proposals by groups of seascape stakeholders to obtain financial and technical support for the projects which they prioritise, and enable them to present these proposals to UNDP Small Grants Program and other sources.
- 4.6 Facilitate discussion within the forum and sub-groups of access rights, which are being introduced in each of the three MPAs, and identify opportunities for improved management, and resolution of actual or potential conflicts (e.g. fishing grounds midway between CSWR and Utila). Use spatial data on resources and their use in the seascape to inform these discussions and develop equitable agreements on access rights. Use this ongoing dialogue to advance progress on the introduction of access rights across the whole seascape, taking care to identify and safeguard the interests of vulnerable groups.
- 4.7 Facilitate discussion within the forum and sub-groups of fisheries regulations in the three MPAs and identify opportunities for harmonisation, in order to improve management and promote responsible fisheries throughout the seascape.
- 4.8 Maintain records of the work of the forum and its sub-groups and incorporate in the process periodic feedback from participants to ensure that the forum is effective in serving the needs of members and is valued by them
- Amongst the community members who depend directly on marine resources, identify sub-groups or individuals who are especially vulnerable e.g. because of heavy dependence on subsistence fisheries, marginalisation from decision-making or gender-related factors. Ensure that they are prioritised in the training and empowerment processes.
- 5.2 Complete registration of fishers with access rights to CCMNM and CSWR respectively, and of Utila fishers.
- 5.3 Continue strengthening the CSWR fishing cooperative, APROCUS, and expanding the role of women in it.
- 5.4 Use the successful experience of APROCUS to inspire and guide strengthening of other fishers' organisations associated with Utila and CCMNM, and to

strengthen the systems and structures for participatory governance, especially of CCMNM, as envisaged in the 2014-25 management plan. This will strengthening the Community Commission and increasing the role of women and vulnerable groups within it.

- As part of the above, design and implement a series of training events related to the strengthening of internal organisation, representation, negotiation and conflict management. APROCUS leaders will be involved in sharing their experiences and delivering elements of the training, alongside project partners.
- 5.6 Provide training on participatory governance for staff of co-managers and relevant authorities, to enable them to manage better and benefit from the participatory systems.
- Organize a visit to learn from fishers, NGOs and authorities involved in the Kanan Kay Alliance, Mexico. A minimum of 4 people will travel, including 3 fishers, but we aim to expand the group by finding additional funds and contributions in kind. Undertake post-visit events and informal feedback to relay experiences and ideas.
- Through strategic planning exercises, plus exchange of ideas between the user groups, assist the groups to identify priority livelihood development aims and develop action plans. Where possible, connect the community groups with relevant buyers, collaborators or sources of technical assistance and funding e.g. UNDP Small Grants Program.
- 5.9 For a few selected livelihoods initiatives linked to marine resources (e.g. fisheries, blue crab fishery at Utila, provision of goods and services to tourism industry) and involving women or vulnerable groups, provide technical assistance, market research, business planning advice and/or other small-scale inputs. Where appropriate, develop funding proposals involving the local entrepreneurs and one or more project partners to expand these initiatives.
- 5.10 Prepare and publish a case study and present it in at least one regional event

17. Annex 3: Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date
6A	Number of people to receive other forms of education/training (which does not fall into categories 1-5 above)	51 men + 13 women	Honduran	65			65
6B	Number of training weeks to be provided			3			3
7	Number of (e.g., different types - not volume - of material produced) training materials to be produced for use by host country			5			5
14A	Number of conferences/seminars/ workshops to be organised to present/disseminate findings			1			1
20	Estimated value (£'s) of physical assets to be handed over to host country(ies)			£5,300			£5,300
22	Number of permanent field plots and sites to be established during the project and continued after Darwin funding has ceased			5			5
23	Value of resources raised from other sources (e.g., in addition to Darwin funding) for project work			£90,743			£90,743

Table 2 . Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gende r of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
Current status of the Yellow tail snapper fishery in Honduras_ A snapshot	Report	Centre of Marine Ecology, compiled by Jimmy Andino, reviewed by Jorge Anariba, 2017	Male	Honduran		It will be available on-line through the CEM;s webpage. http://www.utilaecology.org/
Monitoring guidelines for critical ecosystems for Utila (in Spanish)*	Guideline s	Bay Islands Foundation , compiled by Diego Lanza	Male	Honduran		It will be available on-line through the FIB;s webpage http://www.utila-iguana.de/fib/index.html

1. Annex 4 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

The following sample materials have been provided together with this annual report:

- Current status of the Yellow tail snapper fishery in Honduras-A snapshot
- Banner about species importance and conservation of the endemic spiny-tailed
- Monitoring guidelines for critical ecosystems for Utila (in Spanish)
- PPT vulnerability webinar
- Poster activities Gararu Festival (marine turtles)

18. Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@Itsi.co.uk putting the project number in the Subject line.	Yes
Is your report more than 10MB? If so, please discuss with Darwin-Projects@Itsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	No
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	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.	I