Darwin Initiative: Final Report

To be completed with reference to the "Writing a Darwin/IWT Report" Information Note: (https://www.darwininitiative.org.uk/resources-for-projects/reporting-forms-change-request-forms-and-terms-and-conditions/).

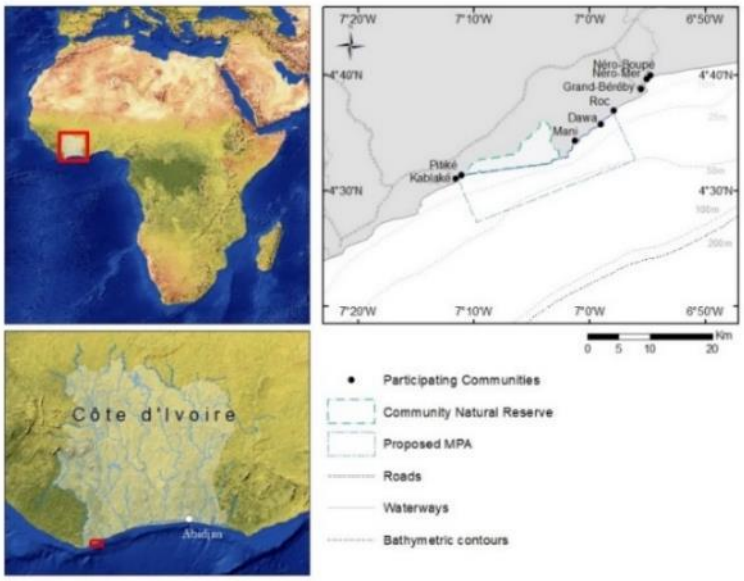
*It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)*

Darwin Project Information

Project reference	26-014
Project title	Empowering Ivorian coastal communities to conserve biodiversity and secure livelihoods
Country(ies)	Côte d'Ivoire
Lead organisation	University of Exeter (**UoE**)
Partner institution(s)	Conservation des Espèces Marines (**CEM**) Ministère de la Production Animale et des Ressources Halieutiques (**MIPARH**) Police Maritime (**PM**) Wildlife Conservation Society, Gabon (**WCS-GAB**) Zoological Society of London (**ZSL**)
Darwin grant value	£346,585
Start/end dates of project	1st June 2019 – 30th March 2022
Project leader's name	Dr Kristian Metcalfe / Prof Brendan Godley (Principal Investigators)
Project website/blog/social media	@associationcem | [redacted] https://www.ong-cem.org/
Report author(s) and date	**UoE** - Dr Kristian Metcalfe / Prof Brendan Godley / Dr Ana Nuno / Dr Phil Doherty; **CEM** - Dr Catherine McClellan / Mr. José Gomez Peñate / Mr. Alexandre Dah; **WCS** – Dr Angela Formia (28th June 2022)

1 Project Summary

Côte d'Ivoire is rapidly developing with increasing foreign investment and overseas aid allocated to the expansion of fishing fleets, port infrastructure and tourism facilities. This is placing increasing pressure on marine biodiversity and resources, as well as expanding coastal communities that rely on the marine environment. To minimise adverse effects on species, ecosystems or biological processes, and fulfil regional (Abidjan Convention) and international (CBD) commitments to sustainable development, the government has pledged to implement a network of marine protected areas (MPAs). One area of interest is near Grand-Béréby in the region of San Pédro (Bas-Sassandra district), where the government adopted a proposal to implement a MPA adjacent to a terrestrial Community Natural Reserve established through funding by Conservation des Espèces Marines (**CEM**) in 2017 (**Fig 1**). The current project stems from a scoping trip in July 2018 (DARSC190) and aims to: (1) support the implementation of this new MPA and serve as a national model for MPA designation, promoting stakeholder engagement and inclusion of local communities in decision making and research; (2) support the



diversification of local livelihoods through capacity-building and partnerships; and (3) facilitate income-generating activities that are linked to a healthy natural environment.

Fig 1 Location of project area within Côte d'Ivoire, and the 7 participating coastal villages (Néro-Mer, Néro-Boupé, Roc, Dawa, Mani, Pitiké, and Kablaké) and town of Grand-Béréby surrounding the recently created terrestrial Community Natural Reserve, and the proposed boundary (area of interest) for the creation of a new marine protected area (MPA).

2 Project Partnerships

The focus of this project stems from priorities identified during a scoping trip in July 2018 (DARSC190) and so has been shaped by priorities of a range of local partners. Over the life of the project, the lead partner University of Exeter (**UoE**) has engaged regularly with the lead in-country partner **CEM,** spending 23 person-weeks in-country. As a result, the partnership between the lead and in-country partner has been demonstrably strong, with significant progress having been made towards achieving the projects stated objectives (Sections 3.1 and 3.2). Whilst it was initially envisaged that staff from **UoE** and other partners would spend more time in country, the recent COVID-19 pandemic and restrictions on national and international travel necessitated a shift in delivery and support of project activities. Consequently, **CEM** took more of a leading role with **UoE** providing training and support remotely through WhatsApp, Skype, Microsoft Teams, and/or Zoom whilst restrictions were in place. This has resulted in a notable shift in **CEMs** capacity, confidence and decision making compared to the start of the project, where **CEM** would want to discuss and/or defer decisions with/to **UoE** staff.

CEM's inclusive approach to ensuring that local and national government agencies are continually appraised of project activities and outputs (the latter through short reports) has also ensured that project outputs have been provided directly to decision makers within Government agencies (Ministère de l'Environnement et du Développement Durable - **MINEDD**; Ministère de la Production Animale et des Ressources Halieutiques - **MIPARH**; Police Maritime - **PM**, Office Ivoirien des Parcs et Réserves – **OIPR**; and Direction de l'Ecologie et de la Protection de la Nature - **DEPN**) and Conventions (Abidjan Convention - **AC**). Consequently, the relationship between national stakeholders, **CEM** and the **UoE** is demonstrably strong as evidenced by several joint announcements in national and international press (Annex 7 Table S1).

3 Project Achievements

3.1 Outputs

Output 1 – Diversified and improved coastal livelihoods: Considerable steps were made towards supporting the diversification and improvement of local livelihoods through the implementation of a range of skills training opportunities, and the establishment of associations/cooperatives and community-business partnerships. To assess the impact of project activities compared to baseline (established in FY1) we implemented a follow up post-intervention socioeconomic survey in local communities which surveyed a total of 472 respondents (42% female) and an average of 68% of households surveyed per rural community (range 32% - 89%).

Of the 289 respondents who demonstrated some familiarity with the project, 208 (72.0%) self-reported having participated in at least one project activity, while 141 (48.8%) self-reported having received some training. Evaluation of the duration, quality of trainers and training materials revealed that trainers and the quality of training materials were the most positive aspects according to survey respondents who took part in at least one training opportunity within the project (n=141), with frequency and duration of training generating most discontent (**Fig. 2**). However, it is worth noting that 38-41% of participants were nevertheless very or extremely satisfied with these aspects. No significant effects were found regarding potential differences in these perceptions according to target area (rural, fishing community in town or general public in town), but men were significantly more satisfied than women regarding duration of training, quality of trainers and importance of training to enhance local livelihoods. These findings suggest that communities valued training events but would like to see longer and more frequent training opportunities.

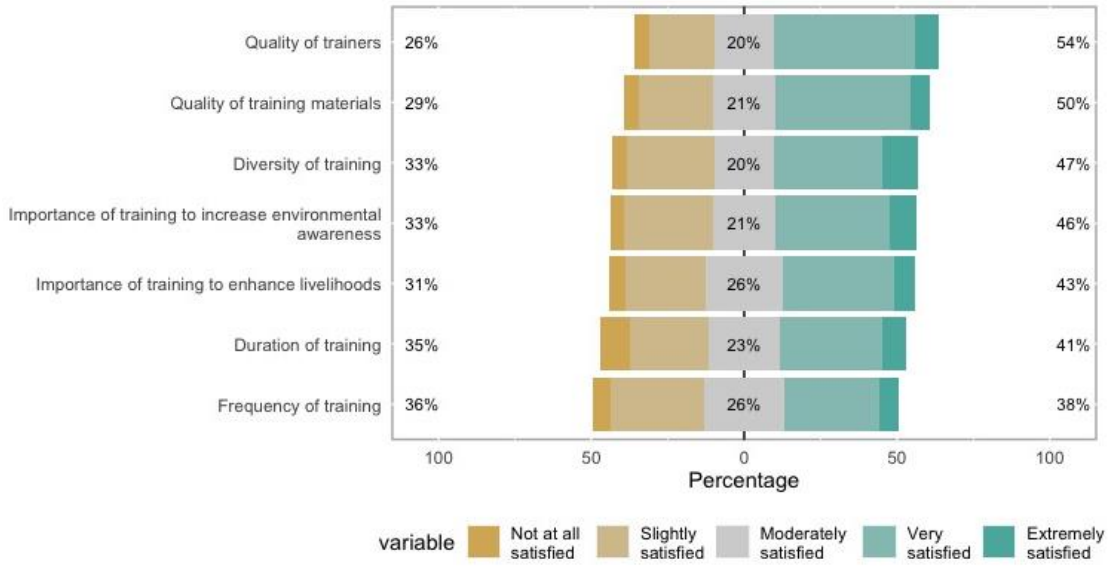


Fig 2. Self-reported levels of satisfaction about training among survey respondents who took part in at least one training opportunity within the project (n=141). Questions answered using a Likert scale ranging from 1 (not at all satisfied) to 5 (extremely satisfied). Percentages represent: general negative perceptions (on the left; combining “not at all satisfied” and “slightly satisfied”), neutral answers (central) and general positive perceptions (on the right; combining “very satisfied” and “extremely satisfied”).

When focusing on the impact of training opportunities and potential changes in self-perceived skills over time, taking project area into account, we found that the ability to read/write a letter has significantly improved among survey respondents. There was also a significant improvement in the ability to manage money, with similar effects across project areas. Meanwhile, calculating monthly expenditure and the self-perceived ability to fill in a bank form have remained similar. All these effects were similar among men and women. There was, however, a general improvement in the number of participants that reported being very confident in their abilities to undertake these tasks (Annex 7 Fig. S2).

Following a number of community workshops attended by 235 persons (Annex 2), the project identified a total of 14 associations/cooperatives to be supported from across 9 locations (8 coastal communities and the town of Grand-Béréby). As of the end of the project, 6 (43%) of the 14 have obtained legal recognition (see Section 6 and Annex 7 documents appended with submission) with these associations (6 mixed gender, 2 male, and 6 female) having approximately 449 members (37% male, 63% female) and focused on: (1) promoting community development and developing income generating activities, such as cassava cultivation, poultry breeding, food crop cultivation and palm oil production (n = 8); (2) implementing income generating activities for women’s empowerment, such as food crop

production, local and sustainable salt production, and the purchase and sale of fish products (n = 4); and (3) promotion of tourist sites, and tourism activities such as diving and fishing (n = 2). There is also increasing awareness of these associations at the community level with the number of people self-reporting as being a member of an association/cooperative increasing from 11% (n = 42 respondents) in 2019 baseline survey to 21.2% (n = 100 respondents) in 2021 post-intervention survey, suggesting a potential increase in memberships resulting from increased support through the project. The development of the ecotourism charter has been ratified by local communities, as well as local and regional government. This charter clarifies the rights and responsibilities of local communities and businesses (see Annex 7 for documents appended with submission) and has improved the fair, transparent and equitable sharing of benefits arising from natural capital through an agreed tariff for different ecotourism activities within local communities, which also details how the funds are distributed (Annex 7 Table S2).

When considering potential changes to household income, wealth, and food security over time following the implementation of project activities, most of the differences are mainly suggestive given wide range of variation. However, food security and the self-reported household income have increased compared to established baselines (**Table 1**; see Annex 7 for documents appended with submission). Furthermore, according to survey respondents, access to some of the basic community services has improved over time, namely: mobile phone coverage, clean water and electricity (Annex 7 Fig S2). Whilst no significant differences were found for the remaining basic services the proportion of participants reporting schools were generally or always shut had decreased considerably (from 49% to 29%), suggesting the projects fund and awareness raising efforts (see Section 9.2 for details) have led to wider community level improvements in access to services.

Table 1. Summary of socioeconomic indicators broken down by survey area and project year. Estimates presented as: mean and standard deviation (within brackets), except for household income where median and interquartile range are presented instead.

Socioeconomic indicator	Survey area					
	Rural		General public in town		Fishing community in town	
	2019	2021	2019	2021	2019	2021
Household size (total)	7.1 (4.9)	8.2 (4.7)	7.3 (5.1)	8.7 (4.1)	7.5 (3.7)	10.8 (4.6)
Wealth index (material)	-0.44 (0.42)	-0.46 (0.51)	0.83 (0.72)	1.13 (0.67)	0.81 (0.62)	0.73 (0.75)
Wealth index (farming assets)	0.22 (0.60)	0.26 (0.64)	-0.19 (0.54)	-0.26 (0.57)	-0.60 (0.21)	-0.62 (0.06)
Livelihoods diversity	2.6 (1.7)	2.6 (1.4)	1.9 (1.0)	1.9 (1.0)	1.9 (1.1)	2.6 (1.0)
Household income per month (multiple occupations; CFA)	100 000 (28 000 – 280 280)	231 525 (71 875 – 450 000)	122 250 (33 750 - 262 500)	150 100 (64 625 – 258 000)	387 550 (150 000- 848 750)	603 250 (316 875 – 1 559 750)
Food security	3.0 (1.6)	4.0 (2.3)	3.3 (2.0)	3.8 (2.7)	3.3 (2.0)	4.1 (2.6)

Output 2 – Improved knowledge of marine biodiversity: We achieved our goal of gathering empirical data using participatory methods to address critical knowledge gaps related to the composition and distribution of habitats and species within the project area. Between December 2018 (post DARSC190 scoping award) and February 2021 a total of 7 survey protocols and training materials were developed (comprising underwater biodiversity monitoring presentation and survey protocol for free-divers n =2, habitat and species data recording

sheets n = 2, equipment manuals to support configuration, maintenance and storage of survey materials n = 3), with a total of 14 days training provided to 6 local free divers in underwater survey techniques. Fieldwork was only viable during a short window when water clarity is best (December – February), with the survey team completing 3 large scale surveys during this period (December 2018, January 2020; February 2021) that were comprised of 25 transects covering ~204 km and 164 sampling locations (**Fig 3**).

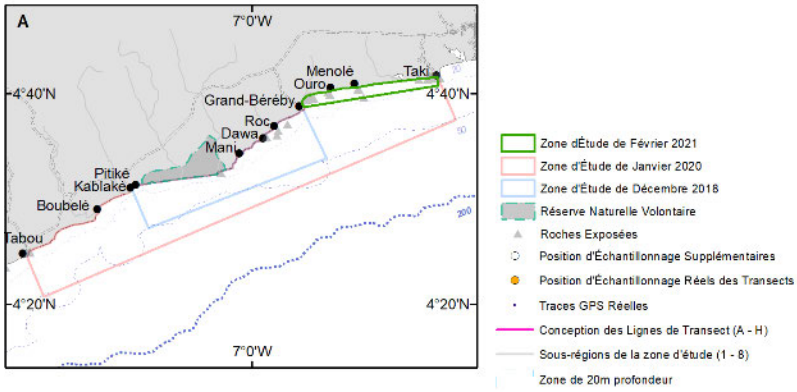


Fig 3 Map depicting the distribution of survey areas in 2018 (blue polygon), 2020 (red polygon), and 2021 (green polygon).

These surveys extended beyond the initial project area to ensure that the proposed MPA would incorporate all ecologically and biologically sensitive areas within the administrative zone of Grand-Béréby. The resulting surveys identified a total of 143 unique species - from a mixture of sandy, muddy, shell, and rocky biogenic benthic habitats, including coral reef like biomes (see Annex 7 for documents appended with submission), with sensitive habitats such as hard and soft corals, sponges, and a variety of marine macro-algae found at all depths sampled (**Fig 4;** for documents appended with submission). The findings from these surveys have been synthesised into two reports that have been shared with national agencies, and incorporated into a marine atlas, and spatial analyses that have underpinned the development of a participatory zoning and management plan (Section 3.2). The information gathered through this aspect of the project was also incorporated into the environmental campaign materials, and environmental education (dissemination) events in local communities, with the latter activity being co-delivered by the local team of researchers involved in underwater biodiversity surveys (Section 3.1 Output 4).

Fig 4 Selection of images from underwater biodiversity surveys within the project area. For more detailed information on the composition, and distribution of species and habitats see Annex 7 reports.

Output 3 – Enhanced fisheries governance: Through the implementation of a range of survey techniques the project has generated a comprehensive understanding of demographic characteristics of fishers (from baseline socioeconomic surveys implemented in FY1), local fishing practices, composition of fisheries catches (including, size and seasonality) and spatial patterns of fisheries resource use. Between September 2019 and September 2021 (n = 2 years) a total of 3 survey protocols were developed (comprising fisheries catch survey data sheets n = 1, morphometric sampling data sheets n = 1, and GPS data collection sheets n = 1), with a total of 7 days training provided to 8 local staff (**CEM**: n = 4; **MIPARH**: n = 4 inclusive of the 3 technicians). Finally, to promote wider engagement **CEM** also engaged fish traders (a role dominated by women) in participatory research - collecting photographs of the various species being processed so that scientists from **UoE**, **WCS** and **CEM** could help make clarifications

among fisheries records, local names of species, and correct nomenclature within species databases. Thanks to a high level of participation **MIPARH** collected data from a total of 760 independent fisheries landing surveys and the deployment of 101 GPS trackers. The resulting landing and fish trader surveys identified a total of 72 bony fish, 6 shark, 11 rays, 4 shellfish, 2 mollusc and 1 echinoderm species, which highlighted a much greater diversity in catch than was apparent from previous surveys implemented by **MIPARH**. This included several species of conservation concern (e.g., oceanic whitetip shark – *Carcharhinus longimanus*; shortfin mako shark - *Isurus oxyrinchus*; blackchin guitarfish - *Glaucostegus cemiculus*, spineback guitarfish - *Rhinobatos irvinei*; whitespotted guitarfish - *Rhinobatos albomaculatus*; sicklefin devil ray - *Mobula tarapacana*; spinetail devil ray - *Mobula mobular;* bull ray - *Pteromylaeus bovinus*), as well as new species records for the region (e.g., smoothback angelshark - *Squatina oculata;* **Fig 5**).

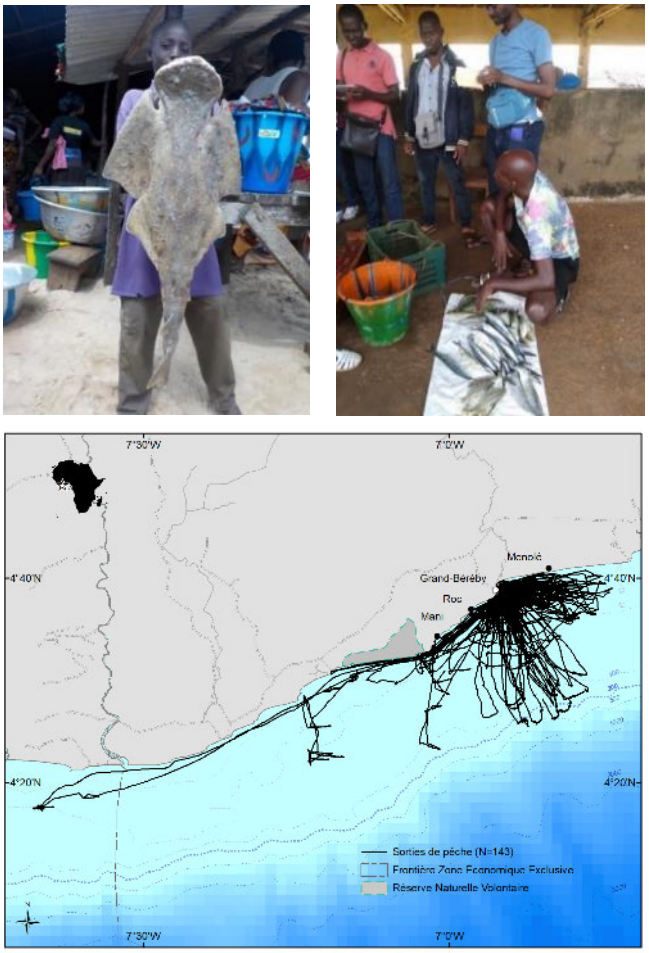


Fig 5 First record of the smoothback angelshark (*Squatina oculata*) in Côte d'Ivoire (left), and the 3-man MIPARH team (standing) who are responsible for undertaking landing site surveys (right) and spatial distribution of artisanal fishing effort derived from GPS tracker data (bottom). For more detailed information on the fisheries see Annex 7 documents appended with submission.

Vessel tracking data also revealed that artisanal fishing effort, which is dominated by seines, surface and bottom gillnets occurred within shallow waters (<50 m depth), within 13 km from shore, with the majority of effort concentrated in the vicinity of Grand-Béréby (**Fig. 4**). There also appears to be consistency between years in the spatial distribution of fishing effort, suggesting either the limit of the fishers' dispersal capacity or preference for the observed fishing grounds. The findings from these surveys have been synthesised into three reports that have been shared with national agencies, and incorporated into a marine atlas, and spatial analyses that have underpinned the development of a participatory zoning and management plan. The information gathered through this aspect of the project was also incorporated into the environmental campaign materials, and environmental education (dissemination) events in local communities (Section 3.1 Output 4).

Output 4 – Environmental education campaigns underpinning local awareness and a community-based marine protected area planning process:

Given the small size of the project area, and high levels of project participation we expected the implementation of environmental education campaigns and seminars within local communities to have an impact on, and lead to positive changes in local behaviours and perceptions. To evaluate the impact of these activities we employed a mixed methods survey to collect baseline (November 2019) and post-intervention (November 2021) socioeconomic information that incorporated questions to evaluate changes in resource use and management preferences. The post-intervention surveyed revealed: (1) that whilst taxa of conservation concern were still

widely consumed there was a significant decrease in prevalence of consumption among respondents for all taxa compared to the baseline (**Fig 6**); (2) general increases in perceptions of factors respondents believe can influence management of natural resources (e.g., collective influence, involvement in management decisions; community compliance; Annex 7 Fig S3) as well as relative increases in management recommendations for improving marine environmental conditions (e.g., creating no take fishing areas increased from 22% to 43% of respondents; Annex 7 Table S3); and (3) increased support for the creation of MPAs which reflects a shift in neutral respondents that have now formed a positive perception about MPAs (Annex 7 Fig S4), that was consistent across all communities compared to baseline survey which suggested rural communities were more supportive of MPA creation. It is also worth noting that this survey revealed that those people who self-reported taking part in project training activities had significantly more positive perceptions when asking more detailed questions about perceived functions and potential benefits of MPAs in the region; which suggests a potential training effect on strengthening of people's positive perceptions about MPAs instead of persuading those against into supporting (Annex 7 Fig S5).

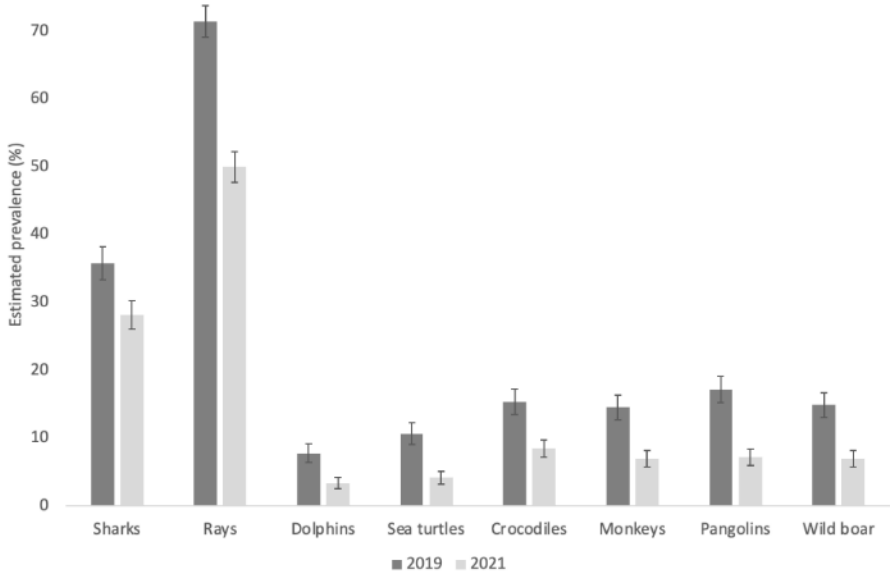


Figure 6. Prevalence of consumption of several marine and terrestrial taxa of conservation concern or interest by surveyed participants according to survey year (2019 = baseline; 2021 = post project intervention).

This project also engaged with, and worked in close collaboration with the **AC**, **MINEDD** and **DEPN** to raise awareness and facilitate the creation of an MPA in Grand-Béréby that ensured representation of local communities in the planning process. Over the life of the project this involved project partners collaborating on the delivery of > 9 days of workshops that involved > 100 participants from local communities, local, national and regional government and the private sector. This comprised: (1) 3-day MPA workshop that focused on bringing together all stakeholders, sharing existing knowledge, raising awareness of the process, and establishing roles and responsibilities; (2) 2-day pre-validation workshop to outline the legal requirements (e.g., documentation and cartography) and timeframe for creation of an MPA; and (3) 2-day classification meeting with local communities, and regional governments to agree on type of MPA to be established. The outcome of these workshops in combination with data gathered through the project (outputs 1 – 3) culminated in the formal creation of a new MPA in Grand-Béréby (see Section 3.2 and 3.4 for more details) - announced on 21st December 2020 and covered by local, national and international media, and attended by government ministers, ambassadors, local and regional government and representatives from local communities (**Fig 7**; see Annex 7 Table S1 for links to press coverage). Post establishment, a 2-day participatory marine protected area zoning and management plan workshop was held with local communities to agree on a zoning plan and the management principles that govern restricted and/or permitted activities (**Fig 7**).

Fig 7 MPA ceremony (left) with Minister for the Environment and Sustainable Development, Professor Joseph Séka Séka giving the opening speech at the ceremony for the creation of Côte d'Ivoire's first marine protected area in Grand-Béréby (21st December 2020).; and (right) MPA zoning and management planning workshop opening speeches from local, regional and national government actors. Please note banner images are environmental education campaign materials created as part of the Darwin Initiative project and include Darwin logos (see section 4.6).

3.2 Outcome

Outcome statement: Implementation of livelihood initiatives and an MPA in the region of San-Pédro (Bas-Sassandra district) delivered in partnership with local communities, fishers, and businesses to enhance biodiversity conservation and livelihoods.

Through an integrated program of capacity building and participatory research this project has equipped local communities and government agencies with the skills and equipment that provided the scientific evidence base on marine biodiversity and ocean user-groups (see Section 3.1 Outputs 2 and 3) that has underpinned the creation of Cote d'Ivoire's first marine protected area in Grand-Béréby. Participatory workshops delivered in partnership with government agencies have also ensured that local communities have agreed on the extent and type of MPA to be established (**Fig 8**) and played a key role in shaping the development of a zoning plan and the management principles that govern restricted and/or permitted activities within each zone (see Section 3.1 Output 4). As a result this new Category VI MPA covering ~2,700 km^2 will include integrally protected (no-take) zones, community artisanal fishing zones, and ecodevelopment zones (**Fig 8**); increasing the amount of Côte d'Ivoire's marine environment under formal protection from a pre-project baseline of 0.07% (source: https://www.protectedplanet.net/country/CIV) to 1.5%. The Government has also pledged that this will be the first of five MPAs to be created to meet international obligations to protect 10% of its waters (see https://www.gouv.ci/_actualite-article.php?recordID=11837).

The implementation of a diversity of livelihood initiatives and training opportunities has led to increases in self-perceived skills, food security and self-reported household income (across all project areas), compared to established baselines (see Section 3.1 Output 1). At the community level, households in which individuals received some form of training had the greatest increases in income compared to established baselines, with the median household income increasing by 117% (137,900 to 300,000 CFA) compared to 81% for households in which respondents did not receive any training (137,900 to 250,000 CFA; Annex 7 Table S4). Similar trends were evident for household's dependent on tourism with the median household income 81% higher (249,450 CFA) than the median household income compared to baseline established for the surveyed population at the start of the project (137,900 CFA; Annex 7 Table S5), suggesting that efforts to support and enhance ecotourism have had positive impacts on

local communities. However, it is worth noting that the increase in median household income was slightly lower for tourism dependent households (249,450 CFA) than non-tourism dependent households (264,500 CFA). Whilst we have no data on changes in prevalence of access to basic services, data gathered on the perceived frequency of accessibility to a range of services revealed that access to some of the basic community services had improved (e.g., mobile phone coverage, clean water, and electricity) and that there was a decrease in proportion of respondents reporting low levels of access to education compared to established baselines (Annex 7 Fig S2).

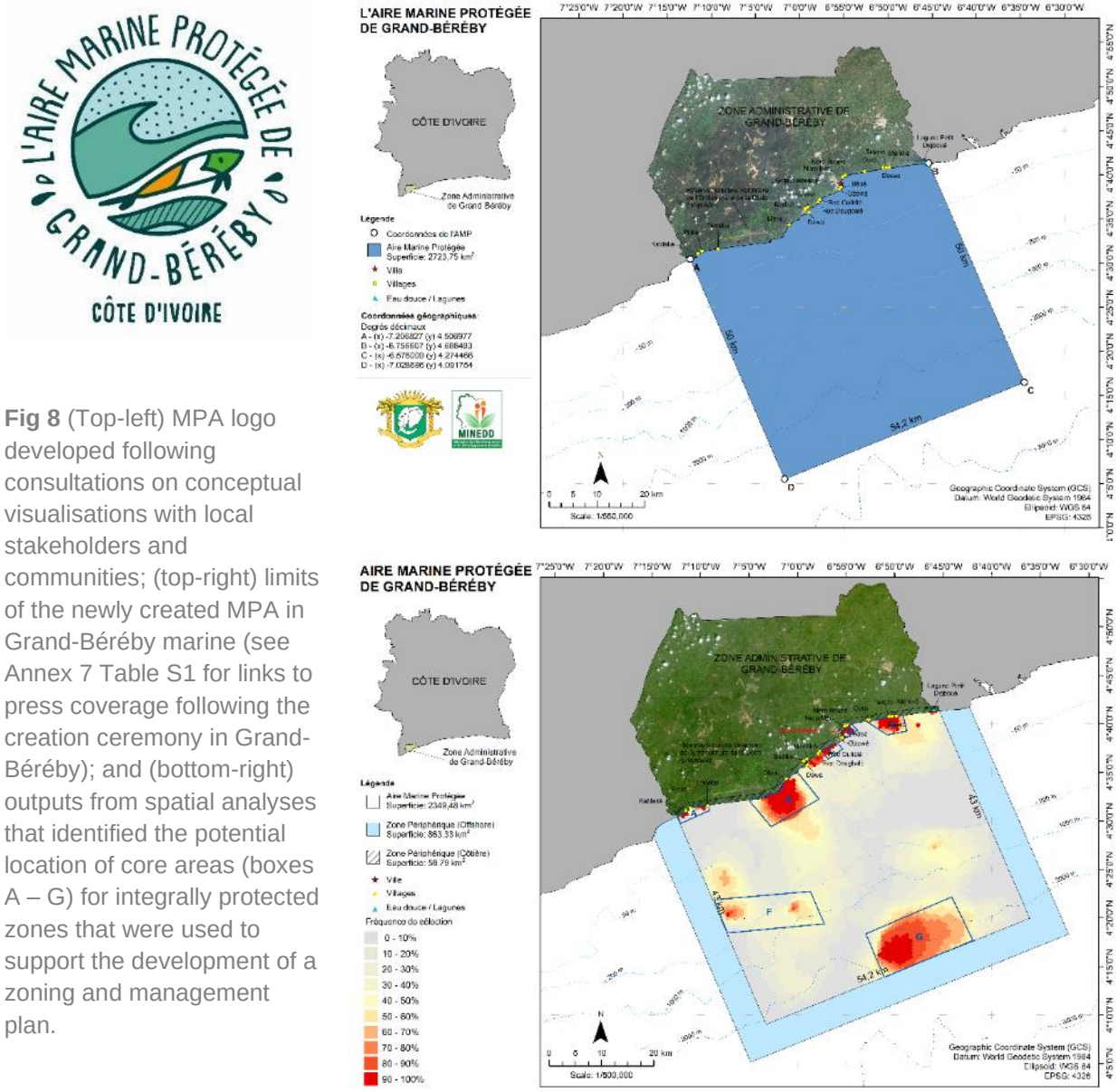


Fig 8 (Top-left) MPA logo developed following consultations on conceptual visualisations with local stakeholders and communities; (top-right) limits of the newly created MPA in Grand-Béréby marine (see Annex 7 Table S1 for links to press coverage following the creation ceremony in Grand-Béréby); and (bottom-right) outputs from spatial analyses that identified the potential location of core areas (boxes A – G) for integrally protected zones that were used to support the development of a zoning and management plan.

3.3 Monitoring of assumptions

Outcome and output level assumptions as detailed in Annex 1 were focused around 5 key areas: (1) **retention** of staff within partner organisations and/or ability to appoint replacements; (2) **ability and willingness** of local communities to access and engage in project activities (e.g., training, workshops, and events); (3) **engagement** in participatory research; (4) **support** to establish an MPA in Grand-Béréby and engage with local communities to deliver more effective conservation outcomes; and (5) **Application** of data to inform decision-making processes. As of the end of the project all individuals appointed in 2019 by **CEM** remain in employment, and all individuals trained within partner organisations are still working in their respective roles. Participation and engagement by communities in data collection and training opportunities has been consistently high (Section 3.1 Output 4, Section 4.7) and provided

opportunities for underrepresented groups that has led to significant representation by women at many events (Section 4.4). Finally, as evidenced by co-delivery of MPA workshops the Government retained commitment to establishing an MPA with data gathered through the project underpinning its extent and the development of a zoning and management plan (Section 3.1 Output 4).

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

This project aimed to enhance food security, poverty reduction and biodiversity conservation in coastal communities through more effective decision making, fostering environmentally sustainable practices, community-business partnerships and initiatives that benefit biodiversity, fisheries resources and livelihoods. Through capacity building and awareness raising initiatives (Section 3.1, Outputs 2 – 4) the project has already made a substantial contribution to biodiversity conservation as a result of: (1) changes in local perceptions and awareness of biological diversity, and the measures required for its conservation and sustainable use (Section 3.1 Output 4); and (2) increased protection of Cote d'Ivoire's waters through the establishment of an MPA that (contributing to **CBD** commitments) greatly enhances protection of sensitive habitats, such as hard and soft corals, sponges, and reefs that play important roles in supporting threatened species such as sea turtles, sharks and rays (covered by **CITES** and **CMS**) for which this region is globally important (Section 3.2). As a result of a bottom up planning process and more effective stakeholder-supported conservation and spatial management measures of these waters (i.e., MPA zoning and management planning) long-term positive impacts on local livelihoods and human well-being are expected through an increase in the size, diversity and abundance of commercial species that spill-over from integrally protected zones into eco-development zones, that contributes to increases in human well-being, poverty prevention, and local food security. Furthermore, we expect the implementation of livelihood interventions (e.g., vocational training, creation of associations; Section 3.1, Output 1) to contribute to long-term improvements in human well-being, employment, and income generation as a result of: (1) the signing of an ecotourism charter that promotes the fair, transparent and equitable sharing of benefits arising from natural capital; and (2) increases in established associations and skilled individuals within communities (Section 3.1 Output 1) that facilitates the transition to alternative livelihood activities and income-generating activities.

4 Contribution to Darwin Initiative Programme Objectives

4.1 Contribution to Global Goals for Sustainable Development (SDGs)

Goal 2 – Zero Hunger: through the creation of the Côte d'Ivoire's first marine protected area that includes integrally protected (i.e., no-take) and community fishing zones this project has contributed to efforts to adopt measures to secure access to resources (Target 2.1), increase food security, and reduce pressures on natural resources that can lead to the inflation of food prices (Target 2c). **Goal 4 – Quality Education:** through the implementation of inclusive education workshops targeting literacy and numeracy and skills training within scientific research and tourism, the project has contributed to efforts to promote equal access to opportunities for men and women (Target 4.3) and increased the number of youth and adults who have the relevant skills (technical and vocational) for employment, decent jobs, and entrepreneurship (Target 4.4). **Goal 5 – Gender Equality:** a focus on working with local communities to adopt practices to promote and ensure equal opportunities for women (Target 5.5) has seen significant representation and inclusion of women across several project activities including stakeholder workshops, vocational training, dissemination events, and the development/support of all female community associations (see Section 3.1 Output 1 and Section 4.4 for more details). **Goal 8 – Decent Work and Economic Growth:** the development of associations and community-business partnerships through the creation of a formal

ecotourism charter (formerly code of conduct) has supported efforts to promote the fair, transparent and equitable sharing of benefits arising from natural capital and facilitate the creation of local income-generating activities (Target 8.3) that are linked to a healthy natural environment. **Goal 14 – Life Below Water**: this project has significantly contributed to the understanding of the distribution of species and habitats, and natural resource users and provided the scientific evidence base that has underpinned the creation of the country's first MPA that contributes towards ongoing commitments to protect at least 10 per cent of coastal and marine areas (Target 14.5), and provides access for small-scale fishers to marine resources through the development of a participatory zoning and management plan (Target 14.b)

4.2 Project support to the Conventions or Treaties (e.g. CBD, Nagoya Protocol, ITPGRFA, CITES, Ramsar, CMS, UNFCCC)

This project has significantly improved the capacity of Côte d'Ivoire to meet its obligations under the Convention on Biological Diversity (CBD; ratified by in 1995). In particular, the project has: (1) increased the knowledge base on marine biodiversity, fisheries, and natural resource use (Article 6); (2) enhanced institutional capacity to ensure scientific evidence underpins decisions (Articles 7, 12) by equipping local, regional and national implementing agencies with the tools (i.e., training, protocols, equipment) to implement marine ecosystem-based management that accounts for all user groups; and (3) supported a participatory planning process that has underpinned the designation of Côte d'Ivoire's first marine protected area and the creation of a zoning and management plan (Article 8), that is focused on ensuring the conservation and sustainable use of marine biological diversity (Articles 10 and 11; Target 6) that contributes to the health, livelihoods and well-being of coastal and fisheries-dependent communities (Target 14). This new MPA also hosts key habitats for several species of regional and global importance (3 species of sea turtle, 7 species of shark and 7 species of ray, including guitarfish which are amongst the most imperilled families globally), therefore contributing to commitments to improve monitoring and protection under **CMS** and **CITES**. Fisheries data gathered through this project have also contributed to the most recent IUCN regional red list status assessment for sharks and rays in West & Central Africa. Most importantly, by engaging a diverse group of stakeholders, promoting community participation in research and decision making (Article 17) and implementing environmental education campaigns and dissemination events the project has increased awareness and understanding of the importance of, and the measures required for, the conservation and sustainable use of biological diversity (Article 13) that has greatly contributed to commitments to mainstream biodiversity across government and civil society (Aichi Biodiversity Targets 1, 2, 4).

4.3 Project support to poverty alleviation

As detailed in Sections 3.1, 3.2, 4.1 and 4.2 this project implemented a range of livelihood initiatives that have led to self-reported increases in skills, household income and food security; as well as providing the foundations to support employment and entrepreneurship through the establishment of a range of associations/cooperatives (in which more members of local communities are participants), and a code of conduct ratified by local communities, business and regional government that ensures fair and equitable sharing of benefits from tourism-based income generating activities.

4.4 Gender equality

The lead partner, **UoE**, has 'strong commitment to ensuring equal opportunities and this is reflected in the project design, in which we have worked closely with **CEM** and local communities to adopt practices to promote equal opportunities, and to remove potential barriers to engagement for underrepresented groups identified at the onset of the project. This approach has resulted in generally high levels of engagement by women throughout the

project. For example, literacy and numeracy training courses were implemented in communities rather than centralised locations to allow women to attend without leaving household and childcare commitments. As a result, of the 233 persons who undertook this course 183 identified as female, with the percentage of females at workshops ranging from 60% to 100% (mean percentage: 79%). Training in good practices for conducting social studies and sampling also ensured that pre, and post-intervention surveys conducted by the survey team targeted underrepresented groups. As a result, of the 855 respondents who completed a socioeconomic survey during the project 336 (39%) identified as female. Representation at environmental education seminars was also high, with 314 (35%) of the 898 persons attending these events identifying as female. Support for the development of community associations within communities also resulted in substantial engagement from women. Of the 235 persons that attended these workshops 68 (29%) identified as female. The outcome of which led to 6 (43%) of the 14 associations supported by the project being focused on empowerment of women. Representatives of these women's associations have been active participants in developing the 'ecotourism charter" to promote community-business partnerships and have remarked that this is the first time that their opinions have been sought in such matters.

However, it is worth acknowledging that similarly high levels of female representation were not evident at multi-day training workshops, or at large community wide meetings and events that were delivered outside individual communities. For example, only 1 (4%) of the 24 individuals who attended the 3-day accredited Ecoguide training program identified as female, the percentage of female attendees at workshops focused on the establishment of an ecotourism charter to promote community-business partnerships ranged between 6% - 7% and across MPA workshops females represented between 3% and 22% of attendees – with the highest representation at the 2-day MPA zoning and management planning workshop where female representation was an average of 22% across the two days. This likely reflects the current cultural norms with regards to sending village chiefs (males) to represent their communities. Nonetheless, our findings should be considered against the current representation of women in national parliament (i.e., 14%) which suggests that the project partners have made a significant contribution to promote equal access, engage with, and enhance opportunities for women across the project area.

4.5 Programme indicators

- **Did the project lead to greater representation of local poor people in management structures of biodiversity?**

Throughout the project local communities have been widely engaged in participatory data collection and the MPA planning process (see Section 3.1 Output 4). For the former this has led to greater awareness of types of measures that can be employed to improve conservation and management of marine biodiversity. For the latter, participatory workshops have ensured local communities have had a voice regarding the type of MPA to be established and participated in the development of a zoning and management plan (see Section 3.2).

- **Were any management plans for biodiversity developed and were these formally accepted?**

Following the creation of an MPA in Grand-Béréby the project co-delivered a participatory planning workshop with the Direction de l'Ecologie et de la Protection de la Nature (**DEPN**) to work with communities to develop a zoning plan and agree on a set of management principles that govern restricted and/or permitted activities within these zones (see Section 3.2). Project partners are now working to develop a final draft that will then undergo a period of consultation within Government agencies before it is formally accepted.

- **Were they participatory in nature or were they 'top-down'? How well represented are the local poor including women, in any proposed management structures?**

The creation of Cote d'Ivoire's first MPA in Grand-Béréby has involved a combination of top-down government led initiatives (i.e., the identification of focus areas for the creation of new MPAs) and bottom-up processes where local communities have participated in data collection that has underpinned its creation, and been consulted and involved throughout the planning process to determine the type of MPA to be established, and how it will be zoned and managed. These processes have been inclusive with high levels of community engagement and participation by women (see Section 4.4)

- **How did the project positively influence household (HH) income and how many HHs saw an increase?**

As detailed in Section 3.2, compared to baselines established from socioeconomic surveys at project start median household income increased by 117% for household in which individuals received some form of training through the Darwin project (137,900 to 300,000 CFA) compared to 81% for households in which respondents did not receive any training (137,900 to 250,000 CFA; Annex 7 Table S4). Similar trends were evident for households dependent on tourism with the median household income 81% higher (249,450 CFA) than the median household for the surveyed population established from socioeconomic surveys at the start of the project (137,900 CFA; Annex 7 Table S5).

- **How much did their HH income increase (e.g. x% above baseline, x% above national average)? How was this measured?**

See above.

4.6 Transfer of knowledge

Project partners have employed a diversity of approaches to increase awareness and transfer information and knowledge to a diverse audience including conservation practitioners, policy makers, and the public. This has included: (1) the creation of three bespoke environmental education campaign materials to increase awareness of local biodiversity and role of management, which have taken the form of infographics (given low levels of literacy and confidence in reading and writing) to address current social norms around marine biodiversity use identified from baseline socioeconomic surveys; which focus on enhancing awareness of the differences between protected and unprotected areas, the ecosystem service benefits of nature (both in a marine and terrestrial context) and current fisheries regulations (**Fig 9**); (2) the delivery of inclusive environmental education seminars to build local expertise within local communities (n = 8) that were co-delivered by staff from **CEM** and individuals from local communities engaged in participatory research; which reached an average of 7.6% of the population within the project area, with an average of 34% of attendees identifying as female; (3) the creation of new biodiversity and fisheries monitoring protocols and databases to enhance local expertise that have been implemented within a strong collaborative and participatory framework involving individuals from local communities (e.g., free divers collecting biodiversity data) and government agencies (e.g., fisheries agents and maritime police); (4) the co-delivery of workshops and diverse skills training to enhance individual and institutional capacity (see Section 4.7); (5) the production of short synthetic reports that have been shared with government agencies and detail the key findings of biodiversity, fisheries and socioeconomic surveys conducted through the project (see Annex 7 for documents appended with submission); and (6) the dissemination of project outputs by project partners and government agencies using a range of media platforms (e.g., videos, tv and radio interviews, blogs, social media and newspaper articles) that have reached audiences locally, nationally and internationally, including interviews on BBC World Service, Africa Today and France 24 (see Annex 7 Table S1 for a list of examples).

Fig 9 Large (2 x 2m) plasticised environmental education campaign materials that take the form of infographics (high resolution versions available online: https://www.ong-cem.org/our-actions).

With regard to the following questions (Did the project result in any formal qualifications? / How many people achieved formal qualifications? / Were they from developing countries or developed countries? / What gender were they?) – the approach adopted by this project was not designed to focus on any one individual or organisation but to increase awareness at a range of social and political levels. Whilst training did not result in any formal qualifications all training was underpinned by robust scientific methods that were adapted to the local context to ensure rigorous data collection standards and quality.

4.7 Capacity building

Capacity building was an integral component of the Darwin Project, and was focused on building skills, knowledge, opportunities and influencing behaviours across three levels of organisation as defined by the United Nations Development Program:

Individuals: capacity within local communities (and institutions) has been enhanced through a diverse program of inclusive skills training to underpin the transition to alternative livelihoods, support entrepreneurship, and develop formal partnerships with the growing number of local businesses providing tourist activities. This has included: (1) a total of 8 weeks of training for 47 individuals (94% male; 6% female) in scientific data collection thereby enhancing local expertise (Annex 3); (2) delivery of vocational training opportunities with 155 literacy and numeracy training sessions attended by 233 persons (21% male; 79% female) across all 7 coastal communities totalling 310 hours that has led to notable increases in self-perceived skills (see Section 3.1 Output 1; and Annex 7 documents appended with submission); and (3) support to provide tourism based income generating activities through a 3-day accredited Ecoguide training program delivered to 24 persons (96% male, 4% female) from across 9 communities. In addition, by targeting training of individuals across several organisations and engaging with a diverse group of stakeholders the legacy of the project will not depend disproportionately on any one individual or organisation, thereby ensuring increased institutional capacity and memory across a range of stakeholders.

Institutions: capacity for 9 individuals within 5 national implementing agencies (**DEPN**, **MIPARH**, **PM**, **OIPHR**, **MINEDD**) has been enhanced through: (1) the development of training materials and survey protocols for socioeconomic data collection using open source software and tablets (n = 2), as well as training manuals, protocols and equipment manuals for biodiversity (n = 6) and fisheries data collection (n = 4) that were underpinned by pilot surveys and training workshops; (2) two years of participatory data collection across 8 coastal communities that has increased the scientific evidence base through 25 marine transects covering ~204 km and 164 sampling locations, 760 independent fisheries landing surveys and the deployment of 101 GPS trackers, and a greater understanding of local socioeconomic context and perceptions resulting from surveys with 855 respondents; (3) co-delivery of stakeholder workshops using local and national experts that has shared best practice in the fields of marine protected area zoning and management; and (4) transfer of knowledge to all

levels of local, regional and national government through the dissemination and sharing of project reports and data (Section 4.6).

Society: to support the transition to, and diversification of, alternative livelihood opportunities, the project has: (1) provided a range of vocational training opportunities to individuals within local communities and national implementing agencies (see above); (2) enhanced community-business relationships and the fair and equitable sharing of benefits arising from natural capital (i.e., income generating tourist activities) through the creation of a formal ecotourism charter (formerly code of conduct) that has been signed by all communities and ratified by local and regional government (see Annex 7 documents appended with submission); and (3) provided funding to support the creation/formalisation of 14 associations that have a total of 449 members and involve a diverse range of activities (Section 3.1 Output 1). Finally, the knowledge developed through this project provides the most comprehensive description of marine biodiversity and human activities within Côte d'Ivoire's waters; and through a range of approaches (Section 4.6) has been disseminated widely, providing individuals, organisations, and society with the knowledge (and data) to make more informed decisions. An emphasis on participatory research and data collection has also ensured that there has been transfer of knowledge and expertise, with high-level of engagement by local communities reflecting the success of partner efforts to improve local capacity to manage marine resources.

With regard to the following questions (*Did any staff from developing country partners see an increase in their status nationally, regionally or internationally? For example, have they been invited to participate in any national expert committees, expert panels, have they had a promotion at work? / What gender were they?)* – the status of M. Alexandre Dah (president of CEM) through collaboration with DEPN has resulted in invites to national workshops related to marine protected areas; similarly, an attendee on the 3-day accredited Ecoguide workshop has undertaken further training in Morocco through support from the regional office for the Ministry of Tourism in San Pedro.

5 Sustainability and Legacy

Being Côte d'Ivoire's only NGO with a specific focus on the marine environment, this project is part of a long-term commitment by **CEM** to *"protect coastal and marine species and habitats through awareness raising activities, community partnerships and scientific research"*. The legacy of this project has been ensured through an integrated and collaborative program of training, research, stakeholder engagement, and awareness raising that has reached a wide audience. For instance, of the 289 respondents in the post-intervention survey (n = 472 participants) who had some familiarity with the project 72% (n = 208) self-reported having participated in one project activity (Section 3.1). This has equipped local communities and national agencies with the skills, equipment and knowledge to better management the natural environment (Section 4.6 and 4.7) as well as providing the scientific evidence base that led to the creation of the country's first MPA, which has increased protection of marine biodiversity and fisheries resources that support local livelihoods. Additional funding secured by **CEM** (Section 9.2) has ensured that project staff will build on this legacy, including: (1) equipping local agencies such as **PM** with the skills and equipment to conduct monitoring, control and surveillance missions (e.g., training in patrol planning, execution and reporting); (2) providing equipment to support alternative livelihood opportunities and entrepreneurship (e.g., cassava grinders, tricycles, ice making machine and cold room for fisheries); (3) providing local communities with employment opportunities linked to healthy natural environment (e.g., sea turtle monitoring, terrestrial ecoguides), and (4) improving access to basic services to reduce pressures on marine biodiversity and help diversify local livelihoods (e.g., electrification of villages). Beyond Côte d'Ivoire there is also increasing awareness and interest in the projects activities and findings in other countries in West and Central Africa – such as Ghana, and Cameroon - which has resulted in the development of new relationships and support to develop

a Darwin Initiative Extra project that scales up achievements from this and other Darwin projects led by **UoE** across the Gulf of Guinea.

6 Lessons learned

Elements of the project that worked well were:

- **Engagement** – identifying and working with local partners who have long-established relationships with local communities and possess a strong understanding of cultural values, sensitivities and protocols helped shape the program of activities to promote engagement. In the context of this study, a key activity was the dissemination of project information that ensured communities were regularly exposed to the project, and how the information they were collecting or contributing was feeding into the delivery of activities, opportunities, and decision-making processes. This led to significant participation, awareness, and engagement throughout all aspects of the project (Section 3.1 and 4.6).
- **Participatory research –** the project has increased capacity with a bottom-up approach of participatory research and data collection that has led to a greater understanding and awareness of local marine biodiversity and natural resource use across the project area, that is reflected in: (1) high levels of community awareness of the importance of, and the measures required for, the conservation and sustainable use of biological diversity (Section 3.1 Output 4); and (2) the use of scientific evidence-based data generated through the project to underpin the Government's decision to designate the country's first marine protected area in Grand-Béréby (Section 3.2, and 4.2).

Elements of the project that were challenging:

- **Administration/Documentation** – a key component of this project involved providing opportunities to improve and diversify local livelihoods, including identifying and supporting the establishment of community associations. Whilst community workshops identified a total of 14 associations/cooperatives to be supported, the formalisation process required greater administrative support and took longer than originally planned as the statutes and internal regulations require agreement amongst members, followed by a signature from the town hall and sub-prefecture before they are legally recognised. Consequently, of the 14 associations supported through the project 6 (43%) have been legally recognised, and so **CEM** is continuing to support the remaining associations to complete the remaining administrative processes.

6.1 Monitoring and evaluation

To assist with the evaluation of project progress and reporting **CEM** produced short summary (internal) reports that provided updates on delivery of activities, as well as detailed reports summarising key findings for outputs that are subsequently shared amongst local and national partners (see Annex 7 for documents appended with submission). This approach helped identify several areas for improvement that largely focused around improving access to information. This included the revising and standardising of datasheets to record the number of participants at workshops, stakeholder meetings and training events to better assess engagement and levels of participation by under-represented and vulnerable groups (see Annex 2 for engagement at key activities that is disaggregated by gender/age where provided by attendees); and investment in cloud storage to ensure a digital archive/repository in which information is stored and can be accessed by project partners. Whilst there was no external evaluation of the projects progress – we carefully reviewed comments provided in the annual report reviews. Most notably - annual report review (AR2) identified that despite the implementation of skills training there was no feedback from participants. Given the importance of this for informing **CEMs** long-term program of work the post-intervention socioeconomic survey was adapted to include a specific section on project participation and the evaluation of quality of trainers and training materials. This has led to a better understanding of awareness of the Darwin Initiative project (Section 7), engagement

in project activities and perceived quality of training, highlighting a demand for more training in the future (see Section 3.1 Output 1).

6.2 Actions taken in response to annual report reviews

The Annual Report Review for FY2 raised 3 comments which requested response in the next report, these were:

Comment: *Provide more quantitative evidence e.g., of training activities – photographs give a general idea of what is going on but are insufficient without some numbers*. **Response:** Annex 2 now details the number of attendees at training events and workshops across each of the project years and is disaggregated by sex and age (where available and/or provided by attendees). Digital copies of attendance sheets can be made available on request.

Comment: *Please provide more detail of the ecotourism charter model mentioned under activity 1.4.* **Response:** Further details on the ecotourism charter are provided in section 3. Please also see Annex 7 documents appended with submission for a copy of the ecotourism charter.

Comment: *Consider rewording indicator 4.3 as discussed below – this would require a change request.* **Response:** As identified in Annual Report 2 (AR2) the reviewer highlighted an error in the wording of indicator 4.3 and stated that this indicator should be based on a numerical target rather than a percentage. We therefore submitted a change request to amend the indicator (as detailed below) which was subsequently approved.

Original indicator	Revised indicator
4.3 Number of individuals within coastal communities (n = 8) and Grand-Béréby attending annual environmental education seminars (i.e., dissemination events), increases by 50% each year for both male and females, from established baselines by project end.	**4.3** Annual environmental education seminars (i.e., dissemination events) within coastal communities (n = 8) are attended by at least 10% of local population (target = 600) each year, with at least 30% of attendees being female.

7 Darwin identity

All project presentations, reports, maps, training materials, survey instruments, promotional material at workshops and ceremonies, and press releases have included the Darwin Initiative logo and/or acknowledged the financial support provided by the Darwin Initiative through Defra - the Department for Environment, Food and Rural Affairs (see Section 3.1 Output 4 and Annex 7 documents appended with submission). The UK Government's contribution and understanding of the Darwin Initiative has therefore been recognised from local to national scales. For the former, final project evaluation surveys revealed that there was a high level of awareness within local communities (see Section 3.1 and Annex 7 documents appended with submission). Among the 472 survey participants, 52.3% (n=250) reported having heard about the "Darwin project" and an additional 8.3% (n=39) mentioned that, although they had not heard about the Darwin project, they heard about a project aiming to establish a marine protected area (MPA) in Grand-Béréby. When looking at potential differences between areas, rural areas (particularly Kablaké) were significantly more likely to be aware of the project (65% of participants in rural vs. 55% in urban areas but there was no differences between general public and fishing community in urban areas). For the latter, the financial support provided by the Darwin Initiative to collect biodiversity, social and economic data is recognised at a ministerial level, particularly within the national implementing agencies responsible for the protection and management of the environment (i.e., **DEPN** and **MINEDD**) as this information provided the scientific evidence base to underpin the Government's decision to implement the

country's first marine protected area in Grand-Béréby (Section 3.2), and actors from these agencies have been involved in the co-delivery of participatory workshops with local stakeholders. Finally, research and awareness raising activities undertaken by all partners are also publicised through a variety of social media platforms (Annex 7 Table S1) and are documented on **CEM'**s website (www.ong-cem.org). **UoE** staff comprised of Professor Brendan Godley ([redacted]), Dr Phil Doherty ([redacted]), Dr Kristian Metcalfe ([redacted], and Dr Ana Nuno ([redacted]) also periodically promote project activities and outputs using twitter that are linked back to the Darwin Initiative social media accounts.

8 Impact of COVID-19 on project delivery

The COVID-19 pandemic and restrictions on national and international travel led to several impacts that necessitated a shift in the timeline of delivery that were approved via several change requests (n = 4) during the project. Impacts and responses included: (1) a delay in purchasing of equipment in-country in FY1 resulting from a shortage in the availability of parts being manufactured and shipped to Côte d'Ivoire from Asia that led to funds being rolled over to allow the purchase of materials in FY2; (2) postponement of the annual environmental education seminars in FY1 to safeguard local communities and meet government measures to restrict gatherings of > 50 persons that led to funds being rolled over to FY2, and taking the number of dissemination events to 16 days in year 2 instead of planned 8 days; (3) cancellation of field visits by international staff in FY2 with funds being reallocated to **CEM** to provide further support to existing activities (i.e., skills training), address increased operational costs associated with the pandemic, and to develop tourism materials following the creation of the MPA in Grand-Béréby; and (4) request for a no-cost extension to allow more time between the delivery of key activities that involve working closely with individuals (i.e., socioeconomic survey, dissemination events, marine protected area workshops) to safeguard local communities given the increased transmissibility of new variants and the lack of available healthcare services in the project area. All project partners see the benefits of increased remote support and will make greater use of virtual meetings moving forward, however, the value and benefits of observing training, workshops and evaluating project activities in-country is critical as it is difficult to capture the nuances of nonverbal communication that are present in face-to-face conversations on a computer screen.

9 Finance and administration

9.1 Project expenditure

Project spend (indicative) since last annual report	2020/21 Grant (£)	2020/21 Total actual Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)	[redacted]	[redacted]	+3%	
Consultancy costs	[redacted]	[redacted]	0	
Overhead Costs	[redacted]	[redacted]	-3%	
Travel and subsistence	[redacted]	[redacted]	-47%	Cost savings made through use of funds from other projects
Operating Costs	[redacted]	[redacted]	+14%	Increased workshop costs
Capital items (see below)	[redacted]	[redacted]	-100%	Data storage costs not required
Others (see below)	[redacted]	[redacted]	-45%	Savings made on M&E across partners

TOTAL	**78.058.00**	**68,938.05**		

Staff employed (Name and position)	**Cost (£)**
Professor Brendan Godley (UoE) – project leader	[redacted]
Dr Kristian Metcalfe (UoE) – project leader	[redacted]
Dr Lucy Omeyer (UoE) – research support	[redacted]
José Gomez Peñate – CEM director	[redacted]
Alexandre Dah (CEM) – project co-ordinator	[redacted]
Dr Catherine McClellan (CEM) Darwin project officer	[redacted]
Nemlin Oscar (CEM) – office administrator/accountant	[redacted]
Moegnan Tiehi Kevin (CEM) - Darwin research assistant	[redacted]
Gha Abel (CEM) - Darwin research assistant	[redacted]
Angela Formia (WCS) - Central Africa Marine Turtle Program Coordinator	[redacted]
TOTAL	[redacted]

Capital items – description	**Capital items – cost (£)**
TOTAL	

Other items – description	**Other items – cost (£)**
CEM office rental	[redacted]
Fishery services (product sampling and weighing)	[redacted]
Project t-shirts for staff members (workshops)	[redacted]
Identification guides (fisheries)	[redacted]
Photo prints (workshops)	[redacted]
Projection screen (community events / training)	[redacted]
Stationery and office consumable costs	[redacted]
Printing costs (workshops)	[redacted]
Website hosting fees	[redacted]
TOTAL	[redacted]

9.2 Additional funds or in-kind contributions secured

Source of funding for project lifetime	**Total (£)**
(Confirmed funding) University of Exeter salaries and overheads	[redacted]
(Confirmed funding) Project partner salaries and overheads	[redacted]
(Confirmed funding) Project partner travel and subsistence	[redacted]
(Confirmed funding) Project partner capital equipment	[redacted]
(Additional funding) Rainforest Trust project on MPA creation, management and enforcement (4 year [redacted] project - 3 years fall within Darwin project duration) https://www.rainforesttrust.org/urgent-projects/creating-cote-divoires-first-marine-protected-area-2/	[redacted]

(Additional funding) GEF-SGP Solar electrification project in Teklebo village ( )	
(Additional funding) US Embassy - Empowering local NGOs and population of Grand-Bereby ( )	
(Additional funding) Rainforest Trust Ecoguide equipment (USD)	
(Additional funding) SIFCA Foundation (2020-2021) Sea turtle conservation in Grand-Bereby ( )	
(Additional funding) US Fish & Wildlife Service (2020-2021) Sea turtle conservation Grand-Bereby	
(Additional funding) SOS Rapid Action Grant Conservation of endangered species and livelihood activities	
(Additional funding) CEPF - Supporting nature based income-generating activities within newly established voluntary terrestrial reserve	
TOTAL	

Source of funding for additional work after project lifetime	**Total (£)**
(Additional funding) Rainforest Trust project on MPA creation, management and enforcement (4 year project - 1 year falls outside Darwin project duration) https://www.rainforesttrust.org/urgent-projects/creating-cote-divoires-first-marine-protected-area-2/	
(Additional funding) SIFCA Foundation (2021-2022) Sea turtle conservation in Grand-Bereby	
(Additional funding) US Fish & Wildlife Service (2021-2022) Sea turtle conservation Grand-Bereby	
(Additional funding) Community initiative for the conservation and development of ecotourism opportunities for the false gharial crocodile in the Dodo Voluntary Nature Reserve, Grand-Bereby	
TOTAL	

9.3 Value for Money

This project, through funding from the Darwin Initiative, has led to a collaborative program of participatory research between local communities, NGOs, international research institutions and government agencies that has played a significant role in raising awareness (Section 3.1 and 3.2) and capacity at local to national scales (Section 4.6). This approach has helped create the conditions that encouraged strong political support - locally, regionally, and nationally - that has elicited changes in awareness and understanding of the importance of, and the measures required for, the conservation and sustainable use of biological diversity that helped underpin the implementation of Cote d'Ivoire's first marine protected area, covering 2,700 km^2 (Section 3.2). This MPA and the participatory approach adopted is now serving as an exemplar for the creation of a further 4 marine protected areas nationally that will help Cote d'Ivoire meet international commitments to protect 10% of its waters. Furthermore, the comprehensive nature of data collected, and training provided has also equipped local stakeholders with the means to evaluate the performance of the MPA over time and its impacts on marine biodiversity and local livelihoods, relative to the baselines established during the project. Finally, the implementation of a diverse range of activities focused on diversifying and improving livelihoods has been well received by local communities (with significant engagement from women) leading to increased skills (technical and vocational) required for employment, decent jobs, and entrepreneurship (Section 3.1 Output 1).

10 OPTIONAL: Outstanding achievements of your project during the (300-400 words maximum). This section may be used for publicity purposes

I agree for the Darwin Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here)