Applicant: **Metcalfe, Kristian**
Organisation: **University of Exeter**

DIR25S2\100054

Empowering Ivorian coastal communities to conserve biodiversity and secure livelihoods

This project aims to support poverty alleviation and biodiversity conservation in coastal communities surrounding Grand-Béréby (located in the district of Bas-Sassandra, region of San Pédro, Côte d'Ivoire), through: (1) increased knowledge of marine biodiversity and fisheries resources underpinning the creation of a community-managed marine protected area; (2) increased environmental awareness and stewardship; (3) a diversified skills base that enhances employment opportunities; and (4) community-business partnerships that promote fair and equitable sharing of benefits arising from natural capital.

PRIMARY APPLICANT DETAILS

Title	Dr
Name	Kristian
Surname	Metcalfe
Organisation	University of Exeter
Website (Personal)	
Tel (Mobile)	
Email (Work)	
Address	

CONTACT DETAILS

Title	Prof
Name	Brendan
Surname	Godley
Organisation	University of Exeter
Website	
Tel	
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Section 1 - Contact Details

PRIMARY APPLICANT DETAILS

Title	Dr
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CONTACT DETAILS

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Name	Brendan
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Tel	
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GMS ORGANISATION

Type	Organisation
Name	University of Exeter
Phone	
Email (Work)	
Website	
Address	

Section 2 - Title, Dates & Budget Summary

Q3. Project title:

Empowering Ivorian coastal communities to conserve biodiversity and secure livelihoods

What was your Stage 1 reference number? e.g. DIR25S1\100123

DIR25S1\100339

Q4. Country(ies)

Which eligible country(ies) will your project be working in? Where there are more than 4 countries that your project will be working in, please add more boxes using the selection option below.

Country 1	Ivory Coast	**Country 2**	*No Response*
Country 3	*No Response*	**Country 4**	*No Response*

Do you require more fields?

⊙ No

Q5. Project dates

Start date:	End date:	Duration (e.g. 2 years, 3 months):
01 April 2019	30 September 2021	2 years, 6 months (30 months)

Q6. Budget summary

Year:	2019/20	2020/21	2021/22	Total request
Amount:	£169,810.00	£114,956.00	£61,819.00	**£** 346,585.00

Q6a. Do you have proposed matched funding arrangements?

⊙ Yes

What matched funding arrangements are proposed?

The project has secured significant match funds equivalent to ~28% (£X) of total project cost from the University of Exeter (UoE) and principal project partners: Conservation des Espèces Marines (CEM), Ministère de la Production Animale et des Ressources Halieutiques (MIPARH), Police Maritime (PM) and Wildlife Conservation Society Gabon Program (WCS-GAB) who have committed match funds towards staff time, overheads, capital equipment, and operating costs to support project delivery. Additional match funding with respect to staff time associated with the implementation of low-cost novel technologies to augment data collection is also provided by the Zoological Society of London (ZSL).

Q6b. Proposed (confirmed and unconfirmed) co-financing as % of total project cost	28

Section 3 - Project Summary

Q7. Summary of project

Please provide a brief summary of your project, its aims, and the key activities you plan on undertaking. Please note that if you are successful, this wording may be used by Defra in communications e.g. as a short description of the project on GOV.UK. Please write this summary for a non-technical audience.

This project aims to support poverty alleviation and biodiversity conservation in coastal communities surrounding Grand-Béréby (located in the district of Bas-Sassandra, region of San Pédro, Côte d'Ivoire), through: (1) increased knowledge of marine biodiversity and fisheries resources underpinning the creation of a community-managed marine protected area; (2) increased environmental awareness and stewardship; (3) a diversified skills base that enhances employment opportunities; and (4) community-business partnerships that promote fair and equitable sharing of benefits arising from natural capital.

Section 4 - Lead Organisation Summary

Q8. Lead organisation summary

Has your organisation been awarded a Darwin Initiative award before (for the purposes of this question, being a partner does not count)?

⊙ Yes

If yes, please provide details of the most recent awards (up to 6 examples).

Reference No	Project Leader	Title
23-011	B.J.Godley / M.J.Witt	Transforming marine resource management in the Republic of Congo
23-012	A.C.Broderick	Improving Marine Biodiversity and Livelihood of coastal communities in Principe
20-009	B.J.Godley / M.J.Witt	Delivering an MPA network for fisheries and biodiversity, Central Africa
19-026	A.C. Broderick / B.J. Godley	Implementing a Darwin Initiative Biodiversity Action Plan for Ascension Island
18-001	B.J. Godley	Darwin Sustainable Artisanal Fisheries Initiative (Peru)
17-005	B.J.Godley / M.J.Witt	Darwin Marine Biodiversity Action Plan for Gabon
Have you provided the requested signed audited/independently examined accounts? If you select "yes" you will be able to upload these. Note that this is not required from Government Agencies.	⊙ Yes	

Section 5 - Project Partners

Q9. Project partners

Please list all the partners involved (including the Lead Organisation) and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development.

This section should illustrate the capacity of partners to be involved in the project. Please provide Letters of Support for each partner or explain why this has not been included.

N.B. There is a file upload button at the bottom of this page for the upload of a cover letter (if applicable) and all letters of support.

Lead Organisation name:	Centre for Ecology and Conservation (CEC) at the University of Exeter (UoE)
Website address:	https://www.exeter.ac.uk/cornwall/research/facilitiesandcentres/cec/
Details (including roles and responsibilities and capacity to engage with the project):	The Centre for Ecology and Conservation (CEC) at the University of Exeter (UoE), established in 2003, currently has 60 active academic faculty with vast interdisciplinary experience who are engaged in research in the fields of evolutionary biology, behavioural ecology, fundamental/applied ecology, conservation and social sciences. CEC has an established track record of working with a diverse range of stakeholders and partner organisations on Darwin Initiative projects in African countries with high natural resource reliance (i.e. Gabon: 17-005 and 20-009, Republic of Congo: 20-009 and 23-011; and Principe 23-012) covering aspects of ecosystem-based management, resource governance, marine and land-use planning, social science, community engagement, participatory mapping, livelihood diversification, and fisheries monitoring and enforcement. The UoE team is comprised of Principal investigators Dr Kristian Metcalfe (Spatial Ecology/Marine spatial planning) and Professor Brendan Godley (Conservation Science), and researchers Dr Ana Nuno (Fisheries/Livelihoods/Social Science), and Dr Phil Doherty (Spatial ecology / marine vertebrates) – all of whom have been involved in these previous projects and so bring a diverse set of skills and experiences to the project. UoE will be responsible for coordinating the project, overseeing project activities and training, undertaking monitoring and evaluation (M&E), supporting data analysis and publications with in-country partners.
Have you included a Letter of Support from this organisation?	⊙ Yes
Have you provided a cover letter to address your Stage 1 feedback?	⊙ Yes

Do you have partners involved in the Project?

⊙ Yes

1. Partner Name:	Conservation des Espèces Marines (CEM)
Website address:	http://www.ong-cem.org/index.php?id=185&L=1

Details (including roles and responsibilities and capacity to engage with the project):	Conservation des Espèces Marines (CEM) Côte d'Ivoire's only local NGO with a specific focus on the marine environment was established in 2014 and is the primary implementing partner. CEM is coordinated by José Gomez Peñate who has >20 years of experience in community-based conservation in Côte d'Ivoire, supported by Alexandre Dah who has worked in Grand-Béréby, the focus of this project, since 2010 (and undertaking a PhD at the University of Abidjan). CEM's activities have largely been directed at promoting marine and terrestrial biodiversity conservation and sustainable resource use through community engagement, as well as improving the livelihoods and well-being of coastal communities through the implementation of basic infrastructure and human welfare projects (e.g. schools, infirmaries, dispensaries, solar water-pumps, and water towers). CEM and the proposed project, thus, have strong support (see 17 letters of support) within local communities, and from national and local authorities, including the Naval Police, Ministry of Environment, Ministry of Fisheries, and within local government (i.e. Mayor of Grand Béréby and Sous-Prefét). CEM will be responsible for facilitating meetings, supporting delivery of project activities (supported by Darwin project officer Dr Catherine McClellan) in partnership with local communities, and act as fund administrator in-country.
Have you included a Letter of Support from this organisation?	⊙ Yes

2. Partner Name:	Ministère de la Production Animale et des Ressources Halieutiques (MIPARH)
Website address:	http://www.ressourcesanimales.gouv.ci

Details (including roles and responsibilities and capacity to engage with the project):	Ministère de la Production Animale et des Ressources Halieutiques (MIPARH) was established in 1970 and is the principal national partner in Côte d'Ivoire. MIPARH is responsible for the implementation and monitoring of government policy relating to animal production and fishery resources (décret n° 2007- 458 du 20 Avril 2007). At a national level and within the context of the marine environment, MIPARH is charged with the development of aquaculture and fisheries, management of fisheries infrastructure, maritime control and surveillance (within the exclusive economic zone) and vocational training. MIPARH staff, specifically those employed in Grand Béréby have a well-established partnership with Police Maritime (PM) and have collaborated with CEM since 2014, and so will play a fundamental role in supporting delivery of project activities related to fisheries governance (Output 3). They have already engaged with a number of local communities to pilot activities that are proposed as part of this project (see pilot study results; Fig. 1) – and will contribute to livelihood activities (Output 1) given their in depth knowledge of local communities across the study region.
Have you included a Letter of Support from this organisation?	⊙ Yes

3. Partner Name:	Police Maritime (PM)
Website address:	https://www.affmar.ci/index.php
Details (including roles and responsibilities and capacity to engage with the project):	Police Maritime (PM) falls under the authority of the Directorate General of Maritime and Port Affairs (DGAMP) a branch of the Ministry of Transport in Côte d'Ivoire that is responsible for the enforcement of the national policy on Maritime and Port Affairs. PM is thus responsible for maritime security, which involves working with fisheries-dependent communities to ensure they are adequately registered and have the appropriate legal documentation (i.e. registration certificates, license, tax and insurance) to fish within Côte d'Ivoire's waters. PM staff in Grand-Béréby have a long established relationship with MIPARH and have collaborated with CEM since 2014, and so will play a fundamental role in supporting the delivery of project activities related to fisheries governance (Output 3) and livelihood activities (Output 1). PM will facilitate meetings with fisheries-dependent communities (including fish traders) and provide data on demographics of fishers, as well as the number of registered fishers and boats across the region, and support participatory research and data collection. PM (in partnership with MIPARH) have already engaged a number of local communities to pilot activities that are proposed as part of this project (see pilot study results; Fig. 1) and discussed during a recent scoping trip (DARSC190).

Have you included a Letter of Support from this organisation?	⊙ Yes

4. Partner Name:	Wildlife Conservation Society, Gabon (WCS-GAB)
Website address:	https://gabon.wcs.org/ AND http://www.seaturtle.org/groups/gabon/fr_accueil.html
Details (including roles and responsibilities and capacity to engage with the project):	Wildlife Conservation Society, Gabon (WCS-GAB) has been active in Gabon since 1985, serving as technical advisor to the Government for the creation and management of their extensive network of protected areas. WCS-GAB and UoE have a long-established relationship having been partners on several Darwin Initiative Projects 17-005, 20-009 and 23-011, which have made significant contributions to marine biodiversity conservation and fisheries governance in the region, supporting: (1) the establishment of a network of marine protected areas (MPAs) that cover 46,000km2; (2) the creation of a network of community and industrial fishing zones designed to protect local livelihoods, secure access rights and maintain food security; and (3) the revision of national fisheries laws (Darwin Initiative Project Ref 20-009 Evaluation Score A+). WCS-GAB role in this project is two-fold, firstly, to provide local expertise to support delivery of project activities related to marine biodiversity activities (Output 2) and environmental education and awareness campaigns (Output 4), and secondly, facilitate knowledge and skills exchange between Gabonese and Ivorian researchers. This partnership will be facilitated by Dr Angela Formia (Central Africa Marine Turtle Program Coordinator, and coordinator for the Partenariat Tortues Marines Gabon) who has worked with CEM since 2014 and initiated this partnership (DARSC190).
Have you included a Letter of Support from this organisation?	⊙ Yes

5. Partner Name:	Zoological Society of London (ZSL)
Website address:	https://www.zsl.org/conservation/how-we-work/conservation-technology AND https://www.zsl.org/conservation/conservation-initiatives/conservation-technology/sea-turtle-tagging

Details (including roles and responsibilities and capacity to engage with the project):	Zoological Society of London (ZSL) currently delivers a diverse portfolio of collaborative international conservation projects in over 50 countries worldwide, and has a strong track record of improving/securing marine biodiversity, and promoting the advancement of local livelihoods through engagement with communities, government, private sector and other stakeholders to identify threats, design locally-relevant management plans, and increase local and national capacity using sound science. ZSL also has a dedicated conservation technology department that is working to develop and apply innovative technology and solutions to enhance the work of conservationists and scientists. This department facilitated by Alasdair Davies (Arribada Initiative: http://blog.arribada.org/) will provide technical input and contribute to marine biodiversity surveys, training and data collection using low-cost open source technologies that can be applied by national implementing agencies and local communities (output 2), and so support the creation of engaging education and awareness campaigns that have a strong link to local communities (output 4).
Have you included a Letter of Support from this organisation?	⊙ Yes

6. Partner Name:	*No Response*
Website address:	*No Response*
Details (including roles and responsibilities and capacity to engage with the project):	*No Response*
Have you included a Letter of Support from this organisation?	○ Yes ○ No

If you require more space to enter details regarding Partners involved in the Project, please use the text field below.

No Response

Please provide a cover letter responding to feedback received at Stage 1 if applicable and a combined PDF of all letters of support.

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Section 6 - Project Staff

Q10. Key project personnel

Please identify the core staff on this project, their role and what % of their time they will be working on the project.

Please provide 1 page CVs for these staff, or a 1 page job description or Terms of Reference for roles yet to be filled. Please include more rows where necessary. These should match the names and roles in the budget spreadsheet.

Name (First name, Surname)	Role	% time on project	CV attached below?
Kristian Metcalfe	**Project Leader**	10	Checked
Brendan Godley	Project Leader	10	Checked
Ana Nuno	Postdoctoral Research Fellow (social scientist)	10	Checked
Philip Doherty	Postdoctoral Research Associate (marine spatial ecologist)	13	Checked

Do you require more fields?

◉ Yes

Name (First name, Surname)	Role	% time on project	CV attached below?
José Gomez Peñate	Director CEM	42	Checked
Alexandre Dah	President / Darwin Project Coordinator	42	Checked
Catherine McClellan	Darwin Research Fellow (Project Officer)	50	Checked
Armand Fidele N'Chou	Office Administrator CEM	25	Checked

Please provide 1 page CVs (or job description if yet to be recruited) for the Project staff listed above. Ensure the file is named clearly, consistent with the named individual and role above.

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Have you attached all Project staff CVs?

Yes

Section 7 - Problem Statement & Conventions

Q11. Problem the project is trying to address

Please describe the problem your project is trying to address in terms of biodiversity and its relationship with poverty. For example, what are the drivers of loss of biodiversity that the project will attempt to address? Why are they relevant, for whom? How did you identify these problems?

Côte d'Ivoire has emerged from recent political and socio-economic instability to become one of world's largest exporters of coffee, cocoa, rubber and palm oil. These commodities are, however, sensitive to price fluctuations, leading the government to focus on economic diversification, with increasing foreign investment and development aid allocated to the expansion of fishing fleets, port developments and tourism facilities. This is of particular concern for the conservation and sustainable use of marine biodiversity and resources, as well as for coastal communities which 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 marine protected areas (Arête:0029MINESUB/cab/4avril 'Working group for the creation 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 has requested that a proposed MPA is placed adjacent and/or spatially connected to a terrestrial Community Natural Reserve established in 2017. This MPA has been proposed to protect fisheries resources as well as threatened species (covered by CITES and CMS) and critical habitats, for which this region is globally important (Fig. 1). Such areas are also perceived as providing alternative benefits through eco-tourism. However, a recent scoping trip (DARSC190) revealed that there are limited expertise and empirical data to inform this process, or to determine how this MPA should be managed (e.g. locally managed marine area). Here we build on CEM's work to develop a project that could serve as a national model for MPA designation, promoting stakeholder engagement and inclusion of local communities in decision making and research, as well as supporting diversification of livelihoods through capacity-building and partnerships to facilitate income-generating activities that are linked to a healthy natural environment.

If necessary, please provide supporting documentation e.g. maps, diagrams etc., using the File Upload below:

Fig_1_2_Project_Location_Biodiversity_Threat_Photos_Supporting_Documents

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Q12. Biodiversity Conventions, Treaties and Agreements

Q12a. Your project must support the objectives of one or more of the agreements listed below. Please indicate which agreement(s) will be supported and describe which objectives your project will address and how. Note: projects supporting more than one will not achieve a higher score.

- ☑ Convention on Biological Diversity (CBD)
- ☑ Convention on International Trade in Endangered Species (CITES)
- ☑ Convention on the Conservation of Migratory Species of Wild Animals (CMS)

Q12b. Biodiversity Conventions

Please detail how your project will contribute to the objectives of the agreement(s) your project is targeting. You should refer to Articles or Programmes of work here. Note: No additional significance will be ascribed for projects that report contributions to more than one agreement.

The project will contribute to two of the main objectives of the Convention on Biological Diversity (CBD; ratified by Côte d'Ivoire in 1995) – 'conservation of biodiversity' and 'sustainable use of its components', and is strongly aligned with the CBD's core principles for the programme of Work on Marine and Coastal Biodiversity. In particular, the project will: (1) address current challenges (i.e. limited expertise and empirical data: outputs 2,3) by informing the development of national strategies through a broadening of the knowledge base on marine biodiversity, fisheries and natural resource use (Article 6); (2) promote community participation in research and decision making - corresponding to decision VII/28 on protected areas (Article 17); (3) provide skills training to enhance local capacity to ensure science underpins decision making processes (Articles 7 and 12); and (4) develop a stakeholder-driven planning process that supports the establishment of area-based conservation measures (output 4), such as MPAs (Article 8), that are designed to ensure the conservation and sustainable use of marine biological diversity (Articles 10 and 11), thereby increasing the amount of the marine environment under formal protection (baseline ~0.07%; source: https://www.protectedplanet.net/country/CIV). By actively engaging a wide group of stakeholders - from national and local authorities, NGOs, and local communities, to businesses - environmental education campaigns (output 4) will promote and encourage understanding of the importance of, and the measures required for, the conservation and sustainable use of biological diversity across a range of demographic groups (Article 13).

In addition, by ensuring national biodiversity strategies and management plans are underpinned by scientific evidence and stakeholder involvement (outputs 2, 3), the project will contribute to commitments under the Strategic Plan for Biodiversity 2011-2020 to mainstream biodiversity across government and civil society (Aichi Biodiversity Targets 1, 2, 4). Furthermore, by taking practicable actions to rebuild fish populations and protect key habitats (e.g. rocky/macroalgal dominated reefs, mangroves) through the implementation of area based conservation measures (output 4), such as MPAs (Target 11), the project will help reduce direct pressure on biodiversity and fisheries resources (Target 6), ensuring that marine ecosystems are able to continue to provide essential services (Target 14), which contribute to health, livelihoods and well-being of coastal and fisheries-dependent communities (Target 14).The active involvement of stakeholders throughout all aspects of the project (outputs 1 – 4) also ensures that traditional and ecological knowledge and practices are incorporated into decision making processes, thereby contributing to more effective conservation outcomes as a result of increased capacity and awareness (Targets 18 and 19). Finally, the project has been designed to improve monitoring, protection and awareness of marine biodiversity within Côte d'Ivoire, including marine vertebrates covered by CMS and CITES for which this region is globally-important yet poorly documented with limited data available to inform IUCN status assessments. For instance, the waters surrounding Grand-Béréby host important populations of the leatherback (Dermochelys coriacea), hawksbill (Eretmochelys imbricata), green (Chelonia mydas) and olive ridley (Lepidochelys olivacea) sea turtles all of which are threatened by direct take of

meat/eggs, and bycatch in fisheries (Fig. 2).

Q12c. Is any liaison proposed with the CBS/ABS/ITPGRFA/CITES/CMS/Ramsar focal point in the host country?

◉ Yes

Please give details:

The CMS Secretariat Melanie Virtue and national Focal Point Dr Elisé Napari Yeo from the Ministère de l'Environnement et du Développement Durable (MINEDD) fully support the project and will be involved throughout (see letters of support). This relationship is particularly pertinent that regional implementation partners have mentioned that actions under the MoU concerning Conservation Measures for Marine Turtles of the Atlantic Coast of Africa have become dormant in recent years due to a lack of funding (M. Virtue pers. comm.). This project will thus help address such commitments (Côte d'Ivoire became a signatory to this MoU in 2002).

Q12d. Global Goals for Sustainable Development (SDGs)

Please detail how your project will contribute to the Global Goals for Sustainable Development (SDGs)

This project contributes to 5 UN SDGs detailed below:

Goal 2: Zero hunger security. Activities: education and outreach (output 4), participatory research (outputs 2, 3) stakeholder-driven spatial management and MPA planning process to reduce pressures on marine resources (output 4). Contribution: increase understanding of the importance of, and the measures required to ensure sustainable use of fisheries resources, thereby contributing to increased food security.

Goal 4: Quality education. Activities: skills training for youth and adults (output 1). Contribution: increase skills base for individuals within local communities, reduce in-equalities, and increase employment opportunities.

Goal 5: Gender equality. Activities: implementing equal opportunities policy with explicit targets to promote inclusion of women in training, livelihood diversification and internship activities (output 1). Contribution: promoting full and effective participation and equal opportunities for women.

Goal 8: Decent work and economic growth. Activities: establishment of skills training, community-business partnerships, and tourist activities (output 1). Contribution: provide a platform for local communities to enhance their capacity, diversify their livelihoods, ensure fair and equitable sharing of benefits arising from natural capital in the developing tourism sector, and facilitate income-generating activities that are linked to a healthy natural environment.

Goal 14: Life below water. Activities: education and outreach (output 4), participatory research (outputs 2, 3) stakeholder-driven spatial management and MPA planning process to protect diversity of species and habitats (output 4). Contribution: increase understanding of the distribution, importance of, and the measures required to protect biological diversity, increased capacity and awareness of biodiversity monitoring techniques.

Section 8 - Method, Change Expected, Gender & Exit Strategy

Q13. Methodology

Describe the methods and approach you will use to achieve your intended Outcome and Impact. Provide information on how you will undertake the work (materials and methods) and how you will manage the work (roles and responsibilities, project management tools etc.).

This may be a repeat from Stage 1, but you should update or refine as necessary.

Coastal communities have great potential for community-driven social and environmental change; this project addresses three thematic areas (Fig. 3) to strengthen environmental governance and the capacity of decision-makers, increase local skills, and diversify employment opportunities, highlighted during scoping (DARSC190):

A. Capacity Building: National agencies will be provided training in socio-economic data collection, biodiversity monitoring, and spatial management to improve institutional capacity. Local communities will be provided formal training to support participatory research to better understand their interaction with the natural environment (empowering communities).

B. Research: will cover the following:

B1. Livelihoods: all interventions will be underpinned by robust consideration of social dimensions, providing the rationale and incentive mechanisms to adapt human behaviours toward sustainable use and equitable access to resources. Socio-economic surveys will be conducted pre, and post-intervention to assess social norms, awareness, and develop local indicators/measures of well-being.

B2. Coastal and Marine Biodiversity: Baited Remote Underwater Video Stations (BRUVs) will provide data on the distribution of species/habitats (inc. fish size/abundance/diversity), and novel (ZSL) low-cost wildlife technologies will be used to characterise the movements of endangered sea turtles for which this region is globally-important but lacking in empirical data. These methods will be complemented by sea-based ecological surveys involving local free-divers to collect species/habitat data, facilitating the exchange of local knowledge, and providing credibility to the MPA planning process.

B3. Fisheries: Novel low-cost vessel tracking technologies will be deployed (MIPARH and PM) to characterise the spatiotemporal patterns of fisheries and combined with biodiversity data to develop species status assessments. These data will be complemented by landings surveys to quantify the scale of catches for target and non-target (bycatch) species.
Outputs from B1 – B3 will be: (1) disseminated to stakeholders and highlighted in environmental education campaigns to raise awareness and ensure sustained institutional and local support; (2) used to identify SMART goals and objectives for the proposed MPA, and; (3) incorporated into a participatory community-based planning process that will be underpinned by spatial prioritisation analyses.

C. Livelihood-diversification: This project, in partnership with local businesses in Grand-Béréby, will provide: (1) training in essential skills (such as arithmetic/reading/writing) tailored according to outputs from B1; (2) internship opportunities in vocational skills to build proficiencies within local communities; (3), specialised training for EcoGuides, to support tourism-based income-generating activities; and (4) will provide the creation of a purchasing cooperative to reduce fishing-related repair costs. Furthermore, the project will establish community-business partnerships, including formal agreements and codes of conduct to promote inclusion and the fair and equitable sharing of benefits arising from tourism activities linked to the marine and coastal environment; thereby leaving a legacy of strong environmental and social ethics. An equal opportunities policy will be implemented to promote inclusion of women in skills training, livelihood diversification and internship activities.

Roles and responsibilities: activities will be implemented by CEM, MIPARH and PM, and supported by training from UoE, WCS-GAB and ZSL. Progress towards project outcomes will be evaluated by a steering group comprised of representatives from each partner organisation, local communities and national

implementing agencies.

Q14. Change expected

Detail the expected changes this work will deliver. You should identify what will change and who will benefit a) in the short-term (i.e. during the life of the project) and b) in the long-term (after the project has ended).

Please describe the changes for biodiversity and for people in developing countries, and how they are linked. When talking about people, please remember to give details of who will benefit and the number of beneficiaries expected. The number of communities is insufficient detail – number of households should be the largest unit used. If possible, indicate the number of women who will be impacted.

The aim of the proposed project is to demonstrate how empowering Ivorian coastal communities to conserve biodiversity can secure local livelihoods, and serve as a national model for promoting stakeholder engagement and inclusion of local communities in decision making and research as part of the government's commitment to sustainable development.

1. Marine biodiversity and resource-users:
In the short-term, we expect to see improved knowledge and awareness within 4 national implementing agencies (MIPARH, PM, MINEDD, OIPR) resulting from an increased availability of datasets on marine biodiversity, for which this region is globally-important but lacking data (baseline zero) - from the distribution of fisheries species (including size, abundance and diversity) and critical habitats such as rocky/macroalgal dominated reefs and mangroves, to the spatial ecology of threatened species such as sea turtles, sharks and rays (covered by CITES and CMS), as well as providing additional datasets on the spatial distribution of marine resource users (e.g. artisanal and legal and illegal industrial fisheries) and overlap with biodiversity to inform status assessments that will contribute to more effective decision making.

In the long-term these datasets will facilitate the protection of key biodiversity areas and critical habitats for target (commercially-valuable) and non-target species of conservation concern (such as sea turtles), through strengthening of regulatory and policy frameworks related to fisheries governance and through the implementation of stakeholder-supported conservation and spatial management measures, such as gear restrictions and MPAs. The former will contribute to more sustainable fisheries and reduced bycatch of threatened species, and the latter to increasing the area currently under formal protection (baseline ~0.07%) with more effective management leading to an increase in the size, diversity and abundance of commercial species (baseline data zero) that can spill-over into unprotected areas, which will contribute to long-term food security and increased profitability for fishers (Fig. 3).

2. Coastal livelihoods and environmental awareness:
In the short-term, we expect community engagement (including scientific research and monitoring) and environmental education campaigns, in combination with community-business partnerships to lead to increased awareness of biological diversity, the measures required for its conservation and sustainable use, as well as the important role healthy, productive and diverse marine ecosystems can play in supporting alternative livelihoods, such as tourism-based income-generating activities. In addition, vocational training, internship opportunities, and the creation of cooperatives will provide 8 coastal communities (which host 6,000 individuals) with increased skills to underpin the transition to alternative livelihoods, support entrepreneurship, and to develop formal partnerships with the growing number of local businesses endeavouring to develop tourist activities.

In the long-term, we expect that improved vocational skills and successful community-business partnerships will lead to increased income for individuals (and community development funds) and the well-being of households within these 8 coastal communities; as well as empowerment of women and

youth that will gradually lead to a change in behaviour that reflects increased emphasis on environmental stewardship, a reduction in the illegal take of protected species (such as sea turtles) and more sustainable use of natural resources.

Q15. Gender

All applicants must consider whether and how their project will contribute to reducing inequality between persons of different gender. Explain how your project will collect gender disaggregated data and what impact your project will have in promoting gender equality.

The UoE has a strong commitment to ensuring equal opportunities, and so this project aims to deliver a gender-integrated approach, ensuring equal access, participation and opportunities for both women and men throughout the project cycle. Our approach for each output is detailed below:

Output 1 Diversified and improved coastal livelihoods this will involve encouraging participation from under-represented or vulnerable groups during community meetings. Both women and men will be identified and provided with opportunities – with explicit targets to promote full and effective participation of women in skills training, livelihood diversification activities, internships, and attendance at community-business partnership workshops.

Output 2 Improved knowledge of marine biodiversity – we will actively encourage participation by both women and men to get involved with participatory research, thereby ensuring that knowledge gained is disseminated across different gender networks.

Output 3 Enhanced fisheries governance – project partners acknowledge that gender roles vary in fisheries, therefore different gender groups will be convened within communities to accurately characterise the role of gender (and women) in fisheries. For instance women are primarily involved in the processing and marketing of fish, whereas men are responsible for fishing. We will use focus group discussions, key informant interviews and other social science methods to incorporate gender issues and gender related outcomes into Outputs 1 and 4.

Output 4 Environmental education, awareness raising and community-based planning process - baseline levels of awareness of and threats to marine biodiversity will be assessed for all genders with explicit targets to promote participation of women, thereby ensuring that education campaigns account for differences between gender groups. In addition, under-represented or vulnerable groups, such as women, will be encouraged to attend community-based MPA planning workshops ensuring that there is full and effective participation and voice in the decision-making process across all groups within local communities.

Q16. Exit Strategy

State whether or not the project will reach a stable and sustainable end point. If the project is not discrete, but is part of a progressive approach, give details of the exit strategy and show how relevant activities will be continued to secure the benefits from the project. Where individuals receive advanced training, for example, what will happen should that individual leave?

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. The legacy of this project will therefore be fostered through an integrated program of capacity building, research, stakeholder engagement, and awareness raising that will equip local communities, businesses and national agencies with the required knowledge to elicit policy and behaviour change, improve governance and stewardship of marine biodiversity and fisheries resources, which contribute to local livelihoods. Furthermore by engaging with individuals from a range of sectors, as

evidenced by 17 supporting letters - from lead organisation (UoE), lead in-country partner (CEM), 2 international NGOs (WCS-GAB, ZSL), 3 national agencies (MIPARH, PM, OIPR), local government (Sous-Prefét), 4 local communities (Roc, Mani, Pitike, Kablake), president of fishing community, 3 large hotels, and the CMS secretariat and focal point, we are ensuring that the legacy of the project will not depend disproportionately on any one individual or organisation. Additionally, by targeting training of individuals in local and national organisations and within communities we are ensuring increased institutional capacity and memory across a range of stakeholders, as well as dissemination of knowledge across all levels of government and the wider population.

Please provide supporting documentation e.g. maps, diagrams etc., using the File Upload below:

Fig 3 Theory of Change Supporting Document
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pdf 416.14 KB

Section 9 - Existing works, Ethics & Safeguarding

Q17a. Harmonisation

Is this a new initiative or a development of existing work (funded through any source)?

Development of existing work

Please give details:

This endeavour is a direct follow up requested by government agencies and local stakeholders during a recent scoping visit (DARSC190). The implementation of marine protected areas (MPAs) is a national priority with government support confirmed by a recent decree that led to the creation of a dedicated working group (Arête 0029MINESUB/cab/4avril). Accordingly, several areas have been proposed to the government by the Abidjan Convention Secretariat, one of which is near Grand-Béréby, the focus of this project. The government, however, has requested that this MPA be placed adjacent and/or spatially connected to a 5,000ha terrestrial Community Natural Reserve at the Dodo River mouth (Fig. 1), which was established in 2017 by CEM, through funding from the Rainforest Trust (https://www.rainforesttrust.org/projects/last-chance-to-save-rare-coastal-forest-in-cote-divoire/). The scoping visit, however, identified three primary concerns: (1) there is limited empirical data on marine biodiversity, or capacity for monitoring to help define the shape or size of this MPA; (2) local communities and natural resource users (e.g. fishers) need to be included in the decision making processes; and (3) there is a need to increase local capacity and skills base, diversify local livelihoods and create community-business partnerships to facilitate income-generating activities that are linked to a healthy natural environment.

Q17b. Are you aware of any other individuals/organisations/projects carrying out or applying for funding for similar work?

No

Q18. Ethics

Outline your approach to meeting the Darwin Initiative's key principles for research ethics as outlined in the Guidance.

The UoE and ZSL are legally registered in the UK, and CEM is registered as a not-for-profit NGO in Côte d'Ivoire adhering to strict government regulations relating to tax, finance and employment, as well as donor requirements. All organisations are fully committed to following all legal obligations in the UK and Côte d'Ivoire. The UoE also has a strict ethics policy and seeks to promote the highest standards of scientific, scholarly and professional integrity and to give due consideration to the ethical, social and environmental issues arising from activities involving humans and/or wildlife. As such the project will be implemented within a strong collaborative and participatory framework with all research subject to approval by the UoE's Ethics Committee and conducted under appropriate permissions from local government and village authorities, as required by law. Implementation of field activities will be managed and led by Alexandre Dah, an Ivorian national, with all partners continually informed and consulted regarding progress.

Project partners will give due consideration to the rights, privacy and safety of communities and follow established guidelines stipulating that researchers must secure free, prior informed consent from participants and that '…researchers should not harm the safety, dignity or privacy of the people with whom they work…or who might reasonably be thought to be affected by their research' (Code of Ethics, American Anthropological Association 2009). For sensitive topics this will involve using specialised questioning techniques that make it impossible to directly link sensitive data to individuals (Nuno & John, 2015).

All partner organisations will apply operational policies covering all aspects of field operations and welfare, including: health and safety, discrimination, conflicts of interest, anti-bribery and fraud. The UoE also operate a duty of care policy that requires all employees to submit extensive health and safety assessments that are subject to rigorous review.

Q19. Safeguarding

(see Guidance Note 3.8)

Projects funded through the Darwin Initiative must fully protect vulnerable people all of the time, wherever they work. In order to provide assurance of this, we would like projects to ensure they have the appropriate safeguarding policies in place. Please tick the box to confirm you have relevant policies in place and that these can be available on request.

Checked

Section 10 - Biodiversity & Project Information

Q20. Raising awareness of the potential worth of biodiversity

If your project contains an element of communications, knowledge sharing and/or dissemination please provide a description of your intended audience, how you intend to engage them, what the expected products/materials will be and what you expect to achieve as a result. For example, are you expecting to directly influence policy in your host country or is your project a community advocacy project to support better management of biodiversity?

Our work to increase understanding of the measures required for the conservation and sustainable use of biological diversity covers a wide range of stakeholders and audiences. We aim to elicit behaviour and policy change by raising awareness of: (1) Grand-Béréby's marine biodiversity, ranging from the distribution of species and habitats to the spatial ecology of threatened species such as sea turtles, sharks and rays (covered by CITES and CMS); (2) the valued services a healthy and productive marine ecosystem can provide (e.g. sustaining fish/shellfish populations); and (3) the threats this system faces, and how the implementation of spatial management measures such as MPAs may mitigate these threats while also benefiting people. In particular, we will use the following approaches:

Engagement with local communities: skills training workshops on the value of biodiversity to support income-generating (tourism) activities, creation of a code of conduct, environmental education campaigns, and dissemination seminars (including underwater video footage) using data collected by local researchers and communities. Increased engagement through participation in a community—based MPA planning process to address threats to biodiversity and promote economic development.

Engagement with conservation and fisheries agencies: skills training in biodiversity and fisheries monitoring (protocols), development of species distribution maps and status assessments (reports) to increase understanding of threats to marine biodiversity. Stakeholder workshops/presentations on the role of different management strategies to protect marine biodiversity.

Involvement of local businesses: community-business partnership workshop on role of healthy, productive and diverse ecosystem that support income-generating (tourism) activities with local communities, creation of a code of conduct to reduce threats to biodiversity (stewardship), manage expectations and ensure a minimum standard of experience for tourists.

Q21. Capacity building

If your project will support capacity building at institutional or individual levels, please provide details of what form this will take and how this capacity will be secured for the future.

Capacity building is a major component of this project (see 'Q13. Methodology'), and is focused on building skills, knowledge, opportunities and influencing behaviours across three levels of organisation as defined by the United Nations Development Program:

Individuals: providing training to local communities in fundamental and vocational skills to build proficiencies through local education programs, internship opportunities supported by local businesses, and specialised training (such as EcoGuides) to diversify and build the local skills set, and promote long-term community-business partnerships to support tourism-based income-generating activities. Such an approach has been adopted to help support entrepreneurship as well as increase the number of local individuals in formal employment, because scoping (DARSC190) revealed that workers with suitable skills are often recruited from San Pedro or Abidjan - 51 and 400 km away, respectively.

Institutions: providing skills training (and support development of data collection protocols) to enhance the institutional capacity of national implementing agencies involved in natural resource management - with a focus on socio-economic data collection (in support of monitoring and evaluation), biodiversity and fisheries monitoring (using a range of low cost participatory research techniques such as BRUVs and data collection partnerships), and training in the application of spatial management tools to help mitigate pressures on marine biodiversity and advocate sustainable use of fisheries resources through multi-stakeholder workshops. In addition, the project will equip communities with cooperative management models that promote sustainable livelihoods (e.g. community-business partnerships, purchasing cooperative).

Society: to elicit behavioural change at both community and national levels ongoing training will be provided to project partners in effective communication techniques that inform decision makers (supported by reporting templates) and local communities (supported by stakeholder workshops and community feedback sessions; see 'Q25. Monitoring and Evaluation), as well as contribute to environmental education campaign material that will further enhance capacity building initiatives.

Q22. Access to project information

Please describe the project's open access plan and detail any specific funds you are seeking from the Darwin to fund this.

As illustrated in 'Q16. Exit strategy' this project has engaged with a diverse group of stakeholders (see 17 supporting letters) and so data sharing is a fundamental component of the project. In keeping with the UoE's commitment to promote open access to data - summarised findings, tools, and outputs will be distributed to government institutions and implementing agencies responsible for biodiversity conservation and fisheries governance through CEM, MIPARH and PMs in-country networks.

Local stakeholders and communities will be apprised of project findings through environmental education campaigns (in English, French and Krou) and awareness raising events to ensure sustained institutional and local support (output 4). As identified previously (DARSC190) local implementing agencies such as MIPARH and PM are required to provide annual reports, we will therefore embed Darwin Project material within these documents, where requested.

As per previous Darwin projects, we will share findings, and make announcements through community feedback sessions (see 'Q25. Monitoring and Evaluation), UoE and CEM websites, social media (e.g. Twitter/Facebook), to local government (i.e. Town Mayor and Regional Governor) as well as local media outlets (e.g. radio – given adult literacy rate of <44%).

Finally, as part of the UoEs open access policy publications in scientific journals will be archived in pre-submission format (Green Standard) within the UoE's Open Research Exeter (ORE) online repository that is compliant with the RCUK open access policy; thereby reducing open-access publication costs. All these services will be provided by UoE and CEM and require no funds from the Darwin Initiative.

Section 11 - Logical Framework

Q23. Logical Framework

Darwin projects will be required to report against their progress towards their expected Outputs and Outcome if funded. This section sets out the expected Outputs and Outcome of your project, how you expect to measure progress against these and how we can verify this.

Impact:

Food security, poverty reduction and biodiversity conservation in coastal communities are enhanced through effective decision making, fostering environmentally-sustainable practices, community-business partnerships and initiatives that benefit biodiversity, fisheries resources and livelihoods.

Project summary	Measurable Indicators	Means of verification	Important Assumptions

Outcome: 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.	0.1 By end of project, marine biodiversity and ocean user-groups (i.e. fishers) are better integrated into decision making processes (baseline established by end of YR1) as a result of increased knowledge and capacity to collect data within key government agencies involved in natural resource management (n = 4) and local coastal communities (n = 8). 0.2 By end of project, local stakeholders and government agencies agree on a marine protected area boundary, spatial management plan and management model for the proposed MPA in Grand-Béréby, that significantly increases the at-sea area under formal protection from current baseline of 0.07%, and contributes towards CBD commitments to protect at least 10% of ocean area. 0.3. By end of project, a management committee for the proposed MPA in Grand-Béréby is established, with inclusive and equitable representation of local authorities, government agencies and natural resource users. 0.4 By end of project, individuals that have attended skills	0.1 Participation rates and perceived levels of involvement in decision-making obtained from socio-economic surveys and meeting attendance sheets. Data on marine biodiversity (e.g. species status assessments and spatial maps), fisheries (e.g. catch statistics, seasonality of catches, size, diversity and abundance) and ocean user-groups (e.g. fisheries mapping). Peer reviewed papers, government announcements, policy changes (e.g. decrees, arrêtés), and press releases. 0.2 Marine atlas comprising empirical data layers used to support planning process. Protected area planning materials (comprising spatial prioritisation analyses and results, stakeholder evaluation and feedback). Boundary maps and management plan. Government announcements (e.g. decrees or arrêtés) and new legislation relating to designation of an MPA in the region of San Pédro (Bas-Sassandra district). 0.3 MPA committee documents (i.e. structure, role of coastal communities in management, reporting requirements), and operational plans.	Trained individuals remain in employment with partner organisations and/or have the ability to appoint replacements. National implementing agencies remain committed to establishing an MPA in Grand-Béréby. Fishing communities and government retain commitment to sustainable use of marine resources. There are no major economic shocks, anthropogenic or natural disasters affecting local and/or national capacity. Host country remains politically stable.

	workshop / training programs, internships or specialised training see at least a 10% increase in household income, and at least 25% of households in communities engaged in tourism-based income-generating activities see an increase in well-being, from baselines established in YR1. 0.5 By end of project, villages with established community-business partnerships (n = 8) see an increase in centralised community managed funds (from tourism-based income-generating activities) by 50%, and a corresponding increase in improvements in local infrastructure (i.e. access to basic services that improve, education and well-being of communities) from baselines established in YR1.	0.4 Socioeconomic data compiled from community/household /individual surveys (disaggregated by gender). 0.5 Socioeconomic data compiled from community/household /individual surveys (including prior and post establishment of community-business partnerships and skills training). Annual reports of community-based funds.

Output 1: Diversified and improved coastal livelihoods: increased education levels through access to essential skills (reading, writing and arithmetic), that promote entrepreneurship and provide key skills required to underpin and help individuals transition to alternative livelihoods through formal training opportunities, community-business partnerships and creation of cooperatives.	1.1 Number of individuals (> 15yrs of age) in 8 coastal communities with reading, writing, and arithmetic skills (equivalent to local primary education standards) increased by a minimum of 10% from an established baseline by project end. 1.2 Eight participating coastal communities see a minimum of 20% improvement in locally-defined wellbeing indicators (domains to be measured include but not limited to: material style of life, food security, income, and subjective wellbeing) by end of YR3, from baseline established by end of YR1 (minimum target 5% of local population; n = 6,000 individuals). 1.3 By end of YR2, at least 4 (50%) of the 8 coastal communities have established community-business partnerships with local tourism operators from current zero baseline. 1.4 Number of coastal communities with established environmental codes-of conduct increased from zero baseline to 8 (100%) by end of YR2. 1.5 Community management associations/committees	1.1 Socioeconomic data compiled from surveys. Training event attendance certificates, including gender diversity; community feedback received during regular community meetings. 1.2 Socioeconomic data compiled from surveys (disaggregated by gender). 1.3 Workshop attendance, including participant demography, and partnership agreements 1.4 Formal code of conduct among business owners and representatives of local communities. 1.5 Workshop reports, interim field reports, ledger. Community management association/committee documents (i.e. structure and roles). 1.6 Business-owner mentorships, placements and feedback to project partners and interns. Community feedback received during regular community meetings. 1.7 Training workshop attendance certificates (including community demography); training materials, species lists, community guides developed with	Project partners keep accurate records of participants, and anonymise participant feedback. Community members are able to access EcoGuide training courses, skills workshops and internships. Trained individuals remain in employment with partner organisations and/or have the ability to appoint replacements. Cost of subscribing to fisheries cooperative remains achievable for all fishers. The success of the fisher cooperative will be sufficient enough to encourage more fishers to subscribe.

(responsible for management of centralised community funds) established in at least 50% (n = 4) of coastal communities from current zero baseline by end of YR1.

1.6 By end of project, at least 5 local business operators are providing individuals (> 15yrs of age) within coastal communities with 1 month internship opportunities (included but not limited to: hotels, travel companies, engineers/mechanics, solar technician/plumber), with a minimum target of 12 internships positions per year).

1.7 Number of local individuals provided with formal training to be professional EcoGuides (to support: reef tours, recreational fishing, snorkelling, boat excursions, nature/bird walks) within local communities increased from current zero baseline to a minimum of 24 individuals (target n = 3 per community) by end of YR2.

1.8 Grand-Béréby purchasing (mechanics) cooperative established by fishers association by end of YR1, with a minimum of 50% of registered boat owners in Grand- Béréby (n =

experts/trainers.

1.8 Community building designated for outboard engine spares; inventory (supported by Fishermen's Association). Fishers subscribed into the engine spares cooperative; annual accounting of parts and income (supported by the Service des Ressources Animales et Halieutique).

196) subscribed by project end.

Output 2: Output 2. Improved knowledge of marine biodiversity: Empirical data gathered using participatory methods (e.g. sea-based ecological surveys) in combination with autonomous technologies (e.g. BRUVs and animal tracking) leading to increased number of survey protocols and datasets on marine biodiversity (species composition, size, abundance and diversity) movement of threatened species (e.g. sea turtles) and natural resource-users; thereby contributing to CMS, CITES and CBD commitments.	2.1 Number of free divers provided with formal training in sea-based underwater surveys and engaged in participatory research increased from current zero baseline to 6 individuals (n = 4 fishers + 2 boat pilots) by end of YR1. 2.2 Number of individuals within Service des Ressources Animales et Halieutiques (MIPARH) in Grand-Béréby provided with training in biodiversity data collection and monitoring increased from current zero baseline to 4 individuals (50% of local staff) by end of YR1. 2.3 Number of biodiversity monitoring survey protocols, data sheets and databases developed and disseminated to local authorities and national implementing agencies increased from current zero baseline by end of YR2. 2.4 Creation of marine atlas (to support decision making) comprised of a minimum of 60 data layers on marine biodiversity (species and habitats) and natural resource users (e.g. fisheries) completed and disseminated to 4 government agencies (MIPARH, OIPR, MINEDD,	2.1 Training workshop and materials, attendance certificates. Reported survey effort, biodiversity data, maps, spatial data layers and reports. 2.2 Training workshop and materials, attendance certificates. Reported survey effort, biodiversity data, maps, spatial data layers and reports. 2.3 Number of marine biodiversity/fisheries landing protocols, data sheets and databases. 2.4 Draft and final versions of marine atlas. Spatial data layers and maps. 2.5 Species status assessment reports. Species distribution models (spatial data layers) and threat maps.	Target communities remain willing to engage in participatory research and data collection. 100% of free-divers are able to attend training courses. Project partners keep accurate records of participant numbers. Trained individuals remain in employment with partner organisations and/or have the ability to appoint replacements. Local implementing agencies are receptive to training and willing to implement lessons learned. Biodiversity data is used to support decision-making.

	and PM) and local stakeholders by end of YR2. 2.5 By end of YR2, species status assessments have been produced for at least 3 groups (from marine fish, sea turtles, seabirds, marine mammals and elasmobranchs) from current zero baseline and disseminated to 4 government agencies and local stakeholders.

Output 3: Output 3. Enhanced fisheries governance: Improved knowledge on the spatiotemporal distribution of fisheries effort (including illegal fishing), bycatch and fisheries landings as a result of participatory research with fisheries dependent communities, leading to more effective decision making and fisheries governance that accounts for the behaviour of natural resource users.	3.1 By end of YR1, 100% of fisheries-dependent communities (n = 4) are involved in participatory research and data collection from current zero baseline. 3.2 Number of fishing vessels (n = 327 total; see Fig. 1) engaged in participatory data collection (GPS tracking) increased from current zero baseline to at least 10% in each fisheries-dependent community (n = 4) by end of YR2. 3.3 Number of individuals within Service des Ressources Animales et Halieutiques (MIPARH) in Grand-Bereby provided with training in conducting fisheries landing surveys increased from current zero baseline to 4 individuals (50% of local staff) by end of YR1. 3.4 Number of fisheries monitoring/landing survey protocols, data sheets and databases developed and disseminated to local authorities and national implementing agencies increased from current zero baseline by end of YR2. 3.5 By end of YR1, 100% of fisheries dependent communities (n =4) have been provided with training and materials to support recording and reporting of incidences	3.1 Training workshop attendance certificates. 3.2 Vessel tracking reports, descriptive statistics, maps, and spatial data layers. 3.3 Training workshop attendance certificates. Fishing effort, seasonality of catches and statistics. 3.4 Number of sampling protocols data sheets and databases. 3.5 Fisheries training workshop attendance. IUU fishing effort data, prevalence, spatial data layers, database and reports.	Target communities remain willing to engage in participatory research and data collection. Project partners keep accurate records of participant numbers. Trained individuals remain in employment with partner organisations and/or organisations have the ability to appoint suitable replacements. Local implementing agencies are receptive to training and willing to implement lessons learned. Data is used to improve fisheries governance.

	of illegal, unreported and unregulated (IUU) fishing to 2 government agencies (PM and MIPARH).

Output 4: Output 4. Environmental education campaigns underpinning local awareness and a community-based marine protected area planning process: Environmental education campaigns implemented in local communities to increase awareness/knowledge of marine biodiversity, leading to a scientifically-rigorous, community-based planning process and management plan for the proposed MPA in the region of San Pédro (Bas-Sassandra district) that accounts for local resource users and threats to sustainable use.	4.1 Understanding of current social norms around marine biodiversity use and management obtained by end of YR1, based on pre-intervention social information collected through socio-economic questionnaires (minimum target 5% of local population; n = 6,000 individuals). 4.2 Based on findings from indicator 4.1, campaigns to build awareness and support for marine protection and sustainable use developed for each community and implemented in community focal points in 100% of coastal villages (n = 8) by beginning of YR2. Effectiveness of campaigns evaluated using follow up social data collection during YR3. 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, from established baselines by project end. 4.4 By end of YR2, MPA planning workshop held with representatives from 4 government agencies and from all	4.1 Annual marine biodiversity awareness and perception survey findings and reports. 4.2 Evidence of campaign material (in English, French and Krou). Community ceremonies. Biodiversity displays and visitor, tour guide log-books (with demographic questions to ascertain audience reach). 4.3 Community seminar attendance, photographs and community feedback. 4.4 Stakeholder workshop attendance, including demography. List of SMART MPA goals and objectives. Workshop report. 4.5 Visualized MPA design and management scenarios (spatial data layers, maps and dissemination material). MPA consultation and participatory evaluation workshop attendance and feedback. Summary report of consensus actions comprising spatial data layers, maps, dissemination material and final agreed plan.	Local communities remain willing to attend dissemination events and engage in participatory planning workshops. Project partners keep accurate records of participant numbers, and anonymise participant feedback. Participants respond truthfully during discussions / questionnaires. Survey participants respond truthfully during discussions and do not perceive/encounter insurmountable resistance from local government. National implementing agencies remain committed to establishing an MPA in the region of San Pédro (Bas-Sassandra district) and to engaging with local communities to deliver more effective conservation outcomes.

	coastal communities (n = 8)to develop and agree on a set of goals and objectives (SMART) for the proposed MPA, and define management model (i.e. roles and responsibilities of different stakeholders). 4.5 By end of YR3, MPA participatory planning and evaluation workshop held with individuals from 4 government agencies and 100% of coastal communities (n = 8) to evaluate alternative MPA scenarios (that meet goals and objectives identified from 4.4) and develop a consensus spatial management plan.		
Output 5: *No Response*	*No Response*	*No Response*	*No Response*

Do you require more Output fields?

It is advised to have less than 6 Outputs since this level of detail can be provided at the Activity level.

⦿ No

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)

The word count for each individual activity should be no more than 25 words.

Activity details

Activity Number

1.1 Develop and deliver training programmes

Activity Details

Develop and deliver training programmes: in socioeconomic data collection using mixed method approaches to current and new local staff.

Activity details

Activity Number

1.2 Socioeconomic data collection

Activity Details

Socioeconomic data collection: pre, and post-intervention survey assessments using mixed methods (target 10% of coastal population n = 600) community focus groups, and data analyses

Activity details

Activity Number

1.3 Skills training

Activity Details

Skills training: educational material development (tailored from 1.2) skills workshops implemented in each community (n = 2 days per month per community for 1 YR).

Activity details

Activity Number

1.4 Establish community-business partnerships

Activity Details

Establish community-business partnerships: 1 x 2 day workshop with business operators and communities (Inc. age/gender representatives) to identify partnerships, internships, and develop code of conduct.

Activity details

Activity Number

1.5 Establish community-management associations

Activity Details

Establish community-management associations: consultations, community support workshops, including confirmation

ceremonies (8 x 1 day)

Activity details

Activity Number

1.6 Implement community EcoGuide training programme

Activity Details

Implement community EcoGuide training programme: training programme delivery (focusing on guiding, marine, birds, nature/cultural walks with trainers) and materials development.

Activity details

Activity Number

1.7 Establish community fisheries purchasing cooperative

Activity Details

Establish community fisheries purchasing cooperative: identify management committee (structure/role 1 x 2 day workshop), implement cooperative, and monitoring protocols.

Activity details

Activity Number

2.1 Develop and deliver training programmes and data collection protocols

Activity Details

Develop and deliver training programmes and data collection protocols: to local communities to support participatory research and monitoring, mapping and identification of species and habitats.

Activity details

Activity Number

2.2 Field data collection

Activity Details

Field data collection: sea-based underwater surveys, deployment of BRUVs and low-cost technologies to collect data on marine biodiversity (species/habitats) in partnership with local stakeholders.

Activity details

Activity Number

2.3 Data analysis

Activity Details

Data analysis: spatial analyses and species distribution (ecological niche) modelling, habitat and threat mapping, abundance, size, diversity of individuals in study area.

Activity details

Activity Number

2.4 Dissemination of knowledge

Activity Details

Dissemination of knowledge: produce marine atlas and species status assessments for study area to underpin potential legislative changes, CMS commitments and support MPA planning process.

Activity details

Activity Number

3.1 Deliver training programmes and data collection protocols

Activity Details

Deliver training programmes and data collection protocols: to local staff to support participatory research with fisheries communities (landing-surveys / vessel tracking studies / IUU reporting).

Activity details

Activity Number

3.2 Field data collection

Activity Details

Field data collection: deployment of low-cost technologies to map spatial distribution of legal/illegal fisheries, and commencement of landing surveys (fishing effort, seasonality of catches, production).

Activity details

Activity Number

3.3 Data analysis

Activity Details

Data analysis: spatial analyses and distribution maps of legal/illegal fisheries, landings statistics, including effort, bycatch, seasonality of captures, and size of species.

Activity details

Activity Number

3.4 Dissemination of knowledge

Activity Details

Dissemination of knowledge: fisheries data contributing to marine atlas and species status assessments under activity 2.4.

Activity details

Activity Number

4.1 Socioeconomic data collection and analysis

Activity Details

Socioeconomic data collection and analysis: using mixed methods to understand social norms around marine biodiversity use and management (target 10% coastal population n = 600).

Activity details

Activity Number

4.2 Implement environmental education campaigns

Activity Details

Implement environmental education campaigns: in each coastal community (n = 8) using educational material tailored to address current social norms from activity 4.1

Activity details

Activity Number

4.3 Dissemination of knowledge

Activity Details

Dissemination of knowledge: annual environmental education seminars (8 x 1 day) in each community each year to disseminate findings from outputs 2 and 3.

Activity details

Activity Number

4.4 MPA stakeholder workshop

Activity Details

MPA stakeholder workshop: 1 x 2 day workshop to develop goals and objectives and define management model (i.e. roles and responsibilities) with local stakeholders.

Activity details

Activity Number

4.5 MPA planning workshops

Activity Details

Spatial prioritisation analyses: application of Marxan decision support tool (incorporating data from outputs 1-3) to develop a range of scenarios that meet stakeholder goals/objectives.

Activity details

Activity Number

4.6

Activity Details

MPA planning workshops: 1 x 2 day participatory planning and evaluation stakeholder workshop to evaluate scenarios from activity 4.5 and develop a consensus spatial plan

Section 12 - Implementation Timetable

Q24. Provide a project implementation timetable that shows the key milestones in project activities

Please complete the Excel spreadsheet linked below to describe the intended workplan for your project.

Implementation Timetable Template

Please add columns to reflect the length of your project.

For each activity (add/remove rows as appropriate) indicate the number of months it will last, and fill/shade only the quarters in which an activity will be carried out. The workplan can span multiple pages if necessary.

Darwin_R25_STAGE2_REF_DIR25S2_100054_Implementation_Timeline
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Section 13 - Monitoring and Evaluation

Q25. Monitoring and evaluation (M&E) plan

Describe, referring to the Indicators above, how the progress of the project will be monitored and evaluated, making reference to who is responsible for the project's M&E.

Darwin Initiative projects are expected to be adaptive and you should detail how the monitoring and evaluation will feed into the delivery of the project including its management. M&E is expected to be built into the project and not an 'add' on. It is as important to measure for negative impacts as it is for positive impact. Additionally, please indicate an approximate budget and level of effort (person days) to be spent on M&E (see "Finance for Darwin and IWT Guidance").

M&E is an integral component of this project, and will be led by UoE and carried out in partnership with CEM using a range of socio-ecological indicators. This will see the following data collected for each output:

Output 1 Diversified livelihoods: socioeconomic impacts will be assessed in YR1 and re-evaluated at project end through surveys and focus groups that are comprised of mixed methods to evaluate changes in locally-defined wellbeing indicators. Indicators to be adopted throughout the project (e.g. material style of life, food security, assets, employment, education, income, access to services, and subjective wellbeing) will be identified at its inception in order to define context-specific metrics. Additionally, for community-business partnerships and tourism-based income-generating activities, the creation of community management associations will allow partners to monitor key indicators including, increases/decreases in community centralised funds, number of activities on offer, frequency of excursions, business operators engaged, and community participation/employment.

Outputs 2 and 3 Improved knowledge of marine biodiversity and fisheries: will be evaluated in terms of the number of: communities/fishers engaged in participatory research; staff trained (against explicit targets for individuals within each partner organisation); biodiversity/fisheries monitoring protocols, data sheets developed and implemented (with internal reviews of data collected to identify errors and adapt protocols); biodiversity/fisheries datasets and synthesis documents created (e.g. species status assessments and marine atlas). Feedback on synthesis documents will be elicited from national partners to ensure they fulfil key requirements, and contribute effectively to decision making processes and national reporting requirements under CBD, CMS, CITES.

Output 4 Increased environmental awareness and a community-based marine protected area: socioeconomic surveys collated at the start of the project and post implementation will be used to establish participation in activities and evaluate changes in social norms around marine biodiversity use and management (i.e. awareness). Additionally, progress towards implementing a community managed MPA will be measured against key milestones (e.g. workshops completed, participation across stakeholder groups), with the resulting spatial plan evaluated against the current proportion of EEZ under formal protection (0.07%).

To support the monitoring of sustainable development goals, all data will be disaggregated by income, gender, age, race, ethnicity, migratory status, disability, and geographic location, when appropriate and relevant.

Finally, to facilitate reporting and ensure targets are met on-time and on-budget, in-country staff will produce an annual work plan with agreed activities for each output that will be structured around the SMART concept; from which progress will be reported and submitted to the UK project leads on a monthly basis. Combined with regular evaluation of Important Assumptions and stakeholder feedback sessions, monthly reports will enable ongoing assessment of project activities and identification of potential problems. Members of the UK project team who have successfully delivered 11 Darwin Projects will also visit the project biannually (annual review, project evaluation and planning; mid-year review), conducting site visits and training, and meeting with staff, communities, and local management authorities. Outside these formalised meetings, there will be regular communication between project partners' in-country and the UK via email, messaging-groups and conference/video calls.

Total project budget for M&E (this may include Staff and Travel and Subsistence Costs)	
Number of days planned for M&E	90
Percentage of total project budget set aside for M&E	3

Section 14 - Funding and Budget

Q26. Budget

Please complete the Excel spreadsheet linked below, which provides the Budget for this application. Some of the questions earlier and below refer to the information in this spreadsheet.

Darwin and IWT Budget Template

Please refer to the Finance for Darwin/IWT Guidance for more information.

NB: Please state all costs by financial year (1 April to 31 March) and in GBP. The Darwin Initiative cannot agree any increase in grants once awarded.

Please upload your completed Darwin Budget Form Excel spreadsheet using the field below.

Budget_R25_STAGE2_REF_DIR25S2_100054_UoE_Finance_Final
30/11/2018
15:41:48
xlsx 68.32 KB

Q27. Value for Money

Please explain how you worked out your budget and how you will provide value for money through managing a cost effective and efficient project. You should also discuss any significant assumptions you have made when working out your budget.

The project budget was calculated in conjunction with each partner organisation, and is based on > 20 years' of in-country experience by CEM Director José Gomez Peñate and so includes accurate projections of the essential costs. Value for money has been prioritised throughout this application and the resulting project is cost effective for the reasons outlined below:

1. The project has secured significant matched funds (~28%) due to the extensive commitment of staff time, overheads, travel/subsistence, and capital equipment provided by project partners on the ground.

2. Funding for lead organisation (UoE) is largely limited to salaries for 4 experienced researchers who already have extensive experience of successfully managing Darwin projects in Africa (e.g. 20-009 Final

Evaluation Score A+; and 23-011 Annual Review YR2 Score 1).

3. Travel/subsistence costs for UK partners are also minimal due to the financial and logistical support of CEM and La Flotte – with the former providing access to project vehicles and the latter providing storage and meeting space, as well as discounted accommodation when in-country (see support letters).

4. The emphasis of the project is on providing training to in-country partners with field team management and activity implementation primarily conducted by staff employed by CEM (note: 65% of total project funding is allocated to in-country project partners), with the dual benefits of lower salary components as compared to UK employees plus allowing for Ivorian capacity building and empowerment.

5. The project will lead to the creation of 3 new staff positions for Ivorian nationals (Darwin Research Assistants), as well as supporting employment for 3 existing staff members employed by CEM.

6. Use of low-cost open source technologies for fisheries and biodiversity monitoring means that extra funding has been allocated to training, community-business partnerships, livelihood, and internship opportunities.

Q28. Capital items

If you plan to purchase capital items with Darwin funding, please indicate what you anticipate will happen to the items following project end.

Capital expenditure is limited to ~6% with significant funds directed towards human resources, travel/field costs, training/workshops and livelihood activities to allow the scale of the work planned. All field-based items (i.e. handheld GPS units, cameras, BRUVs, satellite phone and underwater survey equipment) are low cost (with the exception of boat and engine) and designed to support long-term data collection, training workshops, biodiversity monitoring, and fisheries engagement. All items will remain in-country post project to allow research initiatives established as part of the project to continue. Please note the cost to purchase a boat and engine account for ~2% of the total budget, since CEM are providing 32% match funding towards the total cost of these items (see budget for more details).

Q29. Match funding (co-financing)

Are you proposing co-financing?

◉ Yes

Secured

Provide details of all funding successfully levered (and identified in the Budget) towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity, as well as any your own organisation(s) will be committing.

Donor Organisation	Amount	Currency code	Comments
University of Exeter (UoE)		GBP	Salaries and overheads.

Conservation des Espèces Marines (CEM)	GBP	Salaries and overheads, fieldwork travel and subsistence, and capital equipment (i.e. boat and engine).
Ministère de la Production Animale et des Ressources Halieutiques (MIPARH) and Police Maritime (PM)	GBP	Staff time.
Wildlife Conservation Society Gabon Program (WCS-GAB) and Zoological Society of London (ZSL)	GBP	Staff time.

Unsecured

Provide details of any co-financing where an application has been submitted, or that you intend applying for during the course of the project. This could include co-financing from the private sector, charitable organisations or other public sector schemes.

Date applied for	Donor Organisation	Amount	Currency code	Comments
No Response	*No Response*	*No Response*	*No Response*	*No Response*
No Response	*No Response*	*No Response*	*No Response*	*No Response*
No Response	*No Response*	*No Response*	*No Response*	*No Response*
No Response	*No Response*	*No Response*	*No Response*	*No Response*

Do you require more fields?

⦿ No

Q30. Financial Risk Management

Explain how you have considered the risks and threats that may be relevant to the success of this project, including the risks of fraud or bribery.

The UoE has robust management systems and protocols in place to address financial risk, including an Anti-Fraud and Bribery policy, with a code of conduct set out for all staff (see: http://www.exeter.ac.uk/staff/employment/codesofconduct/staff/). UoE financial policies and procedures are also subject to regular review and updating, ensuring they remain appropriate for the projects we implement, as well as internal

and external compliance requirements. UoE Health and Safety procedures also require risk assessments and emergency procedures to be completed prior to initiating any activities delivered by UoE staff.

The main risk to the success of this project concerns local community and government support, however, the project team has undertaken significant due diligence as part of previous Darwin scoping visit (DARSC190), with all planned activities designed in partnership with key local stakeholders and supported by local government and national agencies - as evidenced by the number and diversity of the 17 letters of support provided with this application. Furthermore, CEM has well-established connections within local communities, and so possesses a sensitive understanding of the local social, political, economic and ecological issues, in addition to their extensive knowledge of successful delivery strategies in-country.

Section 15 - FCO Notifications

Q31. FCO Notifications

Please put an X in the box if you think that there are sensitivities that the Foreign and Commonwealth Office will need to be aware of should they want to publicise the project's success in the Darwin competition in the host country.

Unchecked

Please indicate whether you have contacted your Foreign Ministry or the local embassy or High Commission (or equivalent) directly to discuss security issues (see Guidance Notes) and attach details of any advice you have received from them.

⊙ Yes, written advice

FCO_response_November_2018
27/11/2018
11:21:11
pdf 887.56 KB

Section 16 - Certification

Q32. Certification

On behalf of the

Company

of

University of Exeter

I apply for a grant of

£346,585.00

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

(This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)

- **I have uploaded CVs for project principals and letters of support.**
- **I have uploaded our most recent signed audited/independently verified accounts and annual report.**

Checked

Name	DR KRISTIAN METCALFE / PROFESSOR BRENDAN GODLEY
Position in the organisation	Lecturer in Marine Conservation / Chair of Conservation Science and Head of University of Exeter's Marine Strategy
Signature (please upload e-signature)	**DARWIN_R25_STAGE2_REF_DIR25S2_100054_ESIGNATURES** 29/11/2018 17:42:00 pdf 95.35 KB
Date	03 December 2018

Section 17 - Submission Checklist

Stage 2 Application - Checklist for submission

	Check
Have you read the Guidance (including Guidance for Applicants and Finance for Darwin and IWT Guidance)	Checked
Have you read, and can you meet, the current Terms and Conditions for this fund?	Checked
Have you provided actual start and end dates for your project?	Checked
Have you provided your budget based on UK government financial years i.e. 1 April – 31 March and in GBP?	Checked
Have you checked that your budget is complete and correctly adds up?	Checked
Has your application been signed by a suitably authorised individual?	Checked
Have you uploaded a 1 page CV for all the Project Staff on this project, including the Project Leader?	Checked
Have you uploaded a letter of support from the main partner(s) organisations?	Checked
Have you included a cover letter from the lead organisation, outlining how any feedback received at Stage 1 has been addressed?	Checked

Have you been in contact with the FCO in the project country/ies and have you included any evidence of this?	Checked
Have you uploaded a signed copy of the last 2 years annual report and accounts for the lead organisation?	Checked
Have you checked the Darwin website to ensure there are no late updates?	Checked
Have you read and understood the Privacy Notice on GOV.UK?	Checked

We would like to keep in touch! Please check this box if you would be happy for the lead applicant (Flexi-Grant Account Holder) and project leader (if different) to be added to our mailing list. Through our mailing list we share updates on upcoming and current application rounds under the Darwin Initiative and our sister grant scheme, the IWT Challenge Fund. We also provide occasional updates on other UK Government activities related to biodiversity conservation and share our quarterly project newsletter. You are free to unsubscribe at any time.

Checked

Data protection and use of personal data

Information supplied in this application form, including personal data, will be used by Defra as set out in the latest copy of the Privacy Notice for Darwin, Darwin Plus and the Illegal Wildlife Trade Challenge Fund available **here**. This Privacy Notice must be provided to all individuals whose personal data is supplied in the application form. Some information, but not personal data, may be used when publicising the Darwin Initiative including project details (usually title, lead organization, location, and total grant value) on the GOV.UK and other websites.

Information relating to the project or its results may also be released on request, including under the 2004 Environmental Information Regulations and the Freedom of Information Act 2000. However, Defra will not permit any unwarranted breach of confidentiality nor will we act in contravention of our obligations under the General Data Protection Regulation (Regulation (EU) 2016/679).