



Submit by Monday 3 December 2012

DARWIN INITIATIVE APPLICATION FOR GRANT FOR ROUND 19: STAGE 2

Please read the Guidance Notes before completing this form. Where no word limits are given, the size of the box is a guide to the amount of information required.

Information to be extracted to the database is highlighted blue.

ELIGIBILITY

1. Name and address of organisation (NB: Notification of results will be by post and email to the Project Leader)

Name: Dr Chris Mees	Address: MRAG Ltd 18 Queen St London, W1J 5PN
-------------------------------	---

2. Stage 1 reference and Project title

(max 10 words)

Strengthening Indian Ocean migratory elasmobranch conservation policy and fisher livelihoods

3. Project dates, duration and total Darwin Initiative Grant requested, matched funding

Proposed start date: 1st April 2013 **Duration of project:** 3 years **End date:** 31st March 2016

Darwin request	2013/14	2014/15	2015/16	2016/17	Total
	£110,670	£84,658	£100,905	£0	£296,233

Proposed (confirmed and unconfirmed) matched funding as percentage of total Project cost: 23.5%

4. Define the outcome of the project. This should be a repetition of Question 24, Outcome Statement.

(max 100 words)

IUU¹ within BIOT² and the wider Indian Ocean reduced through the improved capacity of DFAR³ to manage and govern its multi-day fleet complying with international commitments and data reporting obligations under CBD, CMS and IOTC⁴ for biodiversity conservation. Livelihoods of fishing households sustainably improved through elasmobranch conservation and identification, development and wide-scale uptake promotion of viable livelihood improvement schemes following pilot livelihood initiatives to increase long-term livelihood and food security opportunities in selected communities. Policy recommendations on improvements to the sustainability of elasmobranch fishing in the multi-day fleet will be developed and promoted nationally and regionally including low income countries.

¹ Illegal, unreported and unregulated

² British Indian Ocean Territory

³ Department of Fisheries and Aquatic Resources

⁴ Indian Ocean Tuna Commission

5. Country(ies)

Which eligible host country(ies) will your project be working in. You may copy and paste this table if you need to provide details of more than four countries.

Country 1: SRI LANKA	Country 2:
-------------------------	------------

6. Biodiversity Conventions

Which of the three conventions supported by the Darwin Initiative will your project be supporting? Note: projects supporting more than one convention will not achieve a higher scoring

Convention On Biological Diversity (CBD)	Yes
Convention on Migratory Species (CMS)	Yes
Convention on International Trade in Endangered Species (CITES)	No

6b. Biodiversity Conventions

Please detail how your project will contribute to the objectives of the convention(s) your project is targeting. You may wish to refer to Articles or Programmes of Work here.

Note: No additional significance will be ascribed for projects that report contributions to more than one convention

(Max 200 words)

Overexploitation is a critical threat to the high seas, affecting both fish stocks and habitats. This project contributes to the CBD goals by supporting the conservation and the sustainable use of pelagic elasmobranch species through improved management and governance of the Sri Lankan offshore fisheries. This involves contribution to the development of a finalised National Plan of Action (NPOA) for sharks and directly addresses COP10 Decision X/29 on marine and coastal biodiversity, which endorses approaches promoting international cooperation and coordination for the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction. In addition to supporting high seas conservation, the project contributes to the Aichi Biodiversity Target by providing support for the management of the BIOT MPA through increasing capacity to govern the area as an effective closure.

This project also facilitates Sri Lanka meeting its requirements under the CMS through participation in and support of research and protection measures relating to migratory pelagic shark and ray species. Project activities will also enable Sri Lanka to better fulfil management measures adopted by the IOTC related to sharks, and will contribute to the protection of a number of CITES listed species (e.g. the hammerhead shark, *Sphyrna lewini*).

Is any liaison proposed with the CBD/CITES/CMS focal point in the host country?

Yes No if yes, please give details:

Contact with the primary CBD focal point in Sri Lanka, Mr B.M.U.D. Basnayake will be established on initiation of the project, including an invitation to the inception and final workshops.

7. Principals in project. Please identify and provide a one page CV for each of these named individuals. You may copy and paste this table if you need to provide details of more personnel or more than one project partner.

Lead institution personnel

Details	Project Leader		
Surname	Mees	Martin	Davies
Forename (s)	Chris	Sarah	Tim
Post held	Managing Director	Consultant	PhD student
Institution (if different to above)	MRAG Ltd	MRAG Ltd	Imperial College, London/MRAG Ltd
Department	N/A	N/A	Biology
Telephone			
Email			

Lead institution personnel

Details	Project Leader		
Surname	Arthur	Pearce	Moir-Clark
Forename (s)	Robert	John	James
Post held	Director	Principal consultant	Senior Consultant
Institution (if different to above)	MRAG Ltd	MRAG Ltd	MRAG Ltd
Department	N/A	N/A	N/A
Telephone			
Email			

Implementing partners

Details	Project Partner 1	Project Partner 2	Project Partner 2	Project Partner 2
Surname	Fernando	Nawaz	Khan	Shahid
Forename (s)	Daniel	Rab	Moazzam	Umair
Post held	Project leader and PhD Student	Director/Team Leader Indus for All Programme	Technical Advisor (Marine Fisheries)	Tuna Fisheries Officer
Institution (if different to above)	The Manta Trust and Linnaeus University, Sweden	WWF - Pakistan	WWF - Pakistan	WWF - Pakistan
Department	Natural Sciences			
Telephone				
Email				

Collaborating partners

Details	Project Partner 3	Project Partner 4	Project Partner 5	Project Partner 6
Surname	Hettiarachchi	Griffiths	Anganuzzi	O'Brien
Forename (s)	Nimal	Don	Alejandro	Chris
Post held	Director General of Department of Fisheries & Aquatic Resources	Chief Technical Advisor	Executive Secretary	Regional coordinator
Institution (if different to above)	Ministry of Fisheries & Aquatic Resources Development (MFARD)	Regional Fisheries Livelihoods Programme for South and Southeast Asia (RFLP)	Indian Ocean Tuna Commission (IOTC)	Bay of Bengal Large Marine Ecosystems Project (BOBLME)
Department	Department of Fisheries and Aquatic Resources(DFA R) and National Aquatic Resources Research and Development Agency (NARA)	FAO Regional Office for Asia and the Pacific	N/A	N/A

Telephone				
Email				

Collaborating partners continued

Details	Project Partner 7	Project Partner 8	Project Partner 9
Surname	McManus	Dulvy	Jackson
Forename (s)	John	Nicholas	Susan
Post held	Administrator		President
Institution (if different to above)	BIOT Administration	Shark Specialist Group (SSG) of the International Union for Conservation of Nature (IUCN)	International Seafood Sustainability Foundation (ISSF)
Department	Overseas Territories Directorate	Biological Sciences	N/A
Telephone			
Email			

8. Has your organisation received funding under the Darwin Initiative before? If so, please provide details of the most recent (up to 6 examples).

Reference No	Project Leader	Title
EIDCF006	Dr C.C. Mees	Strengthening management of the British Indian Ocean Territory marine area (Darwin Challenge Fund)

9a. IF YOU ANSWERED 'NO' TO QUESTION 8 please complete Question 9,

What year was your organisation established/ incorporated/ registered?	1985
What is the legal status of your organisation?	NGO Yes/No Government Yes/No University Yes/No Other (explain) Yes/No Private Limited Company Company Registration 2912982
Type of organisation (e.g. University, NGO, private sector, Government Department etc)	Private sector (SME)
Have you unsuccessfully applied to the Darwin Initiative before? If yes please provide the application reference	Yes: 1815: Sustainable management of marine resources for biodiversity conservation in

number(s)	Mozambique 2007: Knowledge and action across scales: Mekong wetland conservation and development. 1802: Fostering Resilient Aquatic Mekong Ecosystems: conservation and development across scales Strategies for addressing by-catch from small-scale shrimp seed collection
How is your organisation currently funded?	(Max 100 words) We are a limited company funded entirely by professional consultant fees
Have you provided appropriate audited/independently examined accounts?	Yes Attached are audited company accounts for financial years Ending March 2011 and March 2012 (Please note that accounts for year ending March 2012 have been prepared but not yet finalised).

9b. Provide detail of 3 contracts previously held by your institution that demonstrate your credibility as a research organisation and provide track record relevant to the project proposed. These contracts should have been held in the last 5 years and be of a similar size to the grant requested in your Darwin application.

Contract 1 Title	Management of the British Indian Ocean Territory Fisheries Regime – transition to an MPA
Contract Value	£80-£100,000 pa (note that whilst the total budget exceeded this amount for all services provided under the contract, that element related to research and the provision of scientific and management advice was approximately equivalent to that of a Darwin award)
Contract Duration	As a fisheries regime, 1991-March 2010, as an MPA, April 2010 – ongoing
Role of institution in project	Sole contractor managing and implementing all aspects of the project including scientific research and advice to client (BIOT Administration, FCO), Fisheries resource surveys and assessments, monitoring control and surveillance to prevent illegal unregulated and unreported (IUU) fishing
Brief summary of the aims, objectives and outcomes of the contract.	<p>A 200 nautical mile Fisheries Conservation and Management Zone (FCMZ) was declared around the Chagos Archipelago, British Indian Ocean Territory on 1 October 1991 and a fisheries regime covering all BIOT fishing waters was established on the same day. On 1 April 2010 the Chagos Archipelago and its FCMZ was declared a Marine Protected area and the last commercial fishing licence expired on 31 October 2010. MRAG established the initial licensing mechanism that formed the basis of the BIOT Fishery Management Regime up to 2010, and since the declaration of the MPA MRAG have been responsible for managing the transition to an MPA management regime.</p> <p>MRAG was responsible for full implementation of the Fisheries management regime and since declaration of the MPA the tasks relate to two areas: Science and Management and Monitoring Control and Surveillance. Specific services provided by MRAG Ltd relevant to this Darwin award include:</p>

	<ul style="list-style-type: none"> • Provision of scientific advice on key exploited species and by-catch species (including sharks), based on strategic research through observer programmes, and participation in the scientific bodies of the IOTC; • Fisheries observer and scientific collection programmes to underpin management; • Technical advice on the implementation of BIOT fishery management and MPA management regimes including the integration of the requirements of BIOT with those of regional inter-governmental bodies such as IOTC, attendance at Commission meetings, and provision of legal advice on the implementation of the fisheries and MPA management regimes. • Surveillance and compliance control, including the placement of fisheries protection officers year round on the BIOT Patrol Vessel, and defining a revised surveillance strategy since the declaration of the MPA; • Reporting of IUU fishing to IOTC Compliance Committee and coordination of bilateral arrangements with Sri Lanka to control IUU by their multi-day fleet.
Reference contact details (Name, e-mail, address, phone number).	John McManus BIOT Administration, Foreign and Commonwealth Office, African Department King Charles Street London SW1A 2AH

Contract 2 Title	Impact Assessment of measures envisaged under the EU Plan of Action for the Conservation and Management of Sharks
Contract Value	€93,950
Contract Duration	Feb 2008 to June 2008
Role of institution in project	MRAG Ltd. was the consortium leader for undertaking impact assessments of proposed policies for the European Commission. In this shark action plan assessment roles included Impact assessment methodology; Environmental, Social and economic impact assessment; Policy formation advice; Data collection; and, Comparing options
Brief summary of the aims, objectives and outcomes of the contract.	<p>The shark action plan Impact Assessment (IA) is a key part of the decision making process for introducing measures and planning responses to the EU plan of action for the conservation and management of sharks. The analysis focused on the economic, environmental and social impacts of the proposed options. These were considered in both qualitative and quantitative terms, and risks and uncertainties were assessed (especially issues of compliance and enforcement). An impact matrix was developed. Other areas included in the assessment included:</p> <ul style="list-style-type: none"> •Comparing the options. This involved a presentation of the advantages and disadvantages of each option we defined, and identification of a preferred option. The principles of effectiveness, efficiency and consistency were included. Noting that final choice was left to the College of Commissioners, options were ranked according to various criteria •Monitoring and evaluation. This involved specification of progress indicators, and both monitoring and evaluation arrangements •Administrative costs. This involved an assessment of the administrative costs (one-time and recurring) for the administrations in charge of the implementation of the Plan of Action.

Reference contact details (Name, e-mail, address, phone number)	Veronika Veits DG MARE Unit B1 European Commission B 1049 Brussels
---	---

Contract 3 Title	An analysis of existing and proposed mechanisms and approaches for achieving sustainable fisheries management
Contract Value	144,000 EUR
Contract Duration	28/05/2010 – 17/12/2010
Role of institution in project	Sole contractor, undertaking research: Analysis of fisheries management; Analysis of governance, finance and technical measures associated with fisheries management; Literature review; Case studies
Brief summary of the aims, objectives and outcomes of the contract.	The HRH Prince of Wales International Sustainability Unit (ISU), part of the Prince's Charities Foundation commissioned MRAG to analyse the best approaches being used around the world to tackle unsustainable fishing practices and then refine and develop these ideas for application in different countries and contexts. This will involve: Compilation of background information on challenges to sustainable fisheries; Analysis of best practice fishery examples; Analysis of business models of best practice fisheries in terms of governance structures, financial mechanisms and technical measures; Conclusions and best practice; Workshop development and presentation. Twenty case study fisheries were reviewed as including pelagic fisheries in India that have a very similar profile to those in Sri Lanka, and pelagic tuna fisheries in Kiribati
Reference contact details (Name, e-mail, address, phone number).	Charlotte Cawthorne The Prince's Charities' International Sustainability Unit Clarence House London, SW1A 1BA

9c. Describe briefly the aims, activities and achievements of your organisation. (Large institutions please note that this should describe your unit or department)

Aims (50 words)

MRAG Ltd is a unique and highly motivated consulting firm dedicated to promoting sustainable utilization of natural resources through sound integrated research, management policies and practices. Our focus on integrated resource management involves consideration of the physical, biological, technical, social, cultural, economic, and institutional elements of resource utilisation.

Activities (50 words)

MRAG has demonstrated a capability in designing fishery resource surveys and developing and evaluating alternative governance structures for fisheries management including co-ordination of multiple stakeholders to facilitate consensus-building processes. Our projects place emphasis on integrating conservation and natural resource management with the overall national, regional, and local economic growth strategies.

Achievements (50 words)

As a leader in the field, MRAG has a long and highly successful history of designing and implementing integrated resource management systems in developing countries including the design and implementation of industrial and artisanal fisheries data collection programmes in over 30 countries.

10. Please list all the partners involved (including the Lead Institution) 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 written evidence of partnerships. Please copy/delete boxes for more or fewer partnerships.

<p>Lead institution and website:</p> <p>MRAG Ltd</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>MRAG Ltd has a core team of 25 staff with considerable backstopping capacity. MRAG Ltd is the lead institution and will maintain responsibility for the overall success of the project, including leading the coordination of activities and the timely delivery of project outputs. MRAG will also maintain responsibility for monitoring and evaluating each stage of project progress and reporting outputs. MRAG will provide technical expertise in the form of specialist training in Monitoring Control and Surveillance (MCS) and catch monitoring and in the design and implementation of social surveying methods.</p>
--	---

<p>Partner Name and website where available:</p> <p>The Government of Sri Lanka (GoSL), Ministry of Fisheries and Aquatic Resources Development - Department of Fisheries and Aquatic Resources (MFARD - DFAR)</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>MFARD-DFAR has played a key role in the development of this project, having initiated the process through a request for technical assistance in management of the multiday fleet. This project builds on the existing relationship between DFAR and MRAG Ltd to ensure a strong partnership throughout the project lifetime.</p> <p>In recent years MFARD has devoted time and effort to improving monitoring of its fisheries, in collaboration with a number of foreign agencies. DFAR will provide staff time for training in data collection methods including catch monitoring and other project activities including additional training courses related to IUU. The National Aquatic Resources Research and Development Agency of DFAR, NARA, will be responsible for co-managing the detailed data collection and data management phases including overseeing the training in sampling and species identification. DFAR will also be closely involved in the monitoring and assessment of project progress and success at each stage, and will be responsible for maintaining the continuation of catch monitoring and the use of information for informing national policy.</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>

<p>Partner Name and website where available:</p> <p>The Manta Trust www.mantatrust.org</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>The Manta Trust will also be involved in this project as an implementing partner. The Manta Trust have contributed to the development of this proposal through providing information related to their current landing site mobulid ray monitoring, and have helped identify key issues that need addressing. The Manta Trust will contribute to the capacity building in the form of training courses for GoSL DFAR staff in developing catch monitoring harmonised with IOTC requirements, and training associated with participatory rural appraisals and household surveys, given their detailed background knowledge of the fisheries and established relationships with fishers. They will also be involved in the development, implementation and evaluation of the livelihoods improvement pilot schemes. The Manta Trust will work alongside DFAR staff in the field in implementing the data collection, focussing on their expertise in the identification of ray species with fishing communities alongside its own post-graduate mobulid data collection and research programme. The Manta Trust will be involved in co-authoring immediate outputs such as working papers and conference presentations. The Manta Trust will also participate in the final recommendations/policy development workshop and be involved in the continuation of work beyond the project lifetime.</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>

<p>Partner Name and website where available:</p> <p>WWF Pakistan</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>WWF-Pakistan will also be an implementing partner, contributing to capacity building training for GoSL DFAR staff by developing and implementing catch monitoring harmonised with IOTC requirements.</p> <p>WWF-Pakistan work in many countries in the Indian Ocean. WWF has considerable expertise in shark identification in the region and have developed a landing site monitoring systems in Pakistan. WWF is therefore able to offer training for a similar data collection system in Sri Lanka and will supply shark identification materials to complement the expertise in ray species identification provided by the Manta Trust. This will allow the further development of expertise locally through shared international skills and experience.</p> <p>WWF has also carried out a number of programmes involving the collection of socio-economic data from fishing communities on IUU activities by Pakistani and Iranian vessels in the Indian Ocean. The skills and experience of WWF-Pakistan will be used to contribute to the development and implementation of a methodology to collect information from fishers on legal and illegal shark fishing by the multiday Sri Lankan fleet.</p> <p>WWF will also be involved in maintaining the long-term sustainability of the project as they establish a local office and continue work with rural communities</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>

<p>Partner Name and website where available:</p> <p>The Indian Ocean Tuna Commission (IOTC)</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>The IOTC will play the role of a collaborating partner in terms of sharing ideas and information related to the current IOTC-OFCF project to align efforts so that this project enhances and builds on the data collection and management schemes implemented to date, by strengthening aspects related specifically to elasmobranch monitoring. The IOTC will be closely involved in assisting the MFARD of Sri Lanka to extend its current data collection and management design with a view to improve identification and monitoring of shark species, as required. In addition, the IOTC will be involved in the final workshop to develop policy recommendations. The IOTC will provide support in the form of outputs from the current IOTC-OFCF Project including evaluation of results of the tuna and shark monitoring protocols recently implemented in Sri Lanka, and provision of species ID keys and cards for use in shark identification.</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>

<p>Partner Name and website where available:</p> <p>Regional Fisheries Livelihoods Programme (RFLP)</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>RFLP will contribute to the development of the socio-economic research component and provide specific ideas and inputs into the design of pilot initiatives. Processes used during the RFLP will be developed further and used throughout this project, along with relevant outputs related to the multiday fisheries. Although the RFLP will officially come to a conclusion by August 2013, a national RFLP consultant in Sri Lanka will still be involved in the final workshop to provide contributions.</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>

<p>Partner Name and website where available:</p> <p>Bay of Bengal Large Marine Ecosystems Programme (BOBLME)</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>BOBLME has been involved in project development through a reviewer role, sharing information on lessons learned from the ongoing BOBLME programme of work and background knowledge of key issues. BOBLME will continue to be involved as a collaborating partner in an information sharing capacity, and project outputs will be used by BOBLME to inform its ongoing work to develop a shark-NPOA for Sri Lanka. Conclusions from the project will also be used to inform regional policy (and a RPOA) given the regional nature of the BOBLME programme. This will expand the influence of the project and lessons learned to the wider Bay of Bengal.</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>

<p>Partner Name and website where available:</p> <p>The BIOT Administration</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>The BIOT Administration has been involved in the development of this project acknowledging the need for better management of the fleet fishing illegally in the waters of the BIOT MPA. The BIOT Administration will continue to be involved as a collaborating partner, providing information and will be involved in the final workshop to develop policy recommendations.</p> <p>There will potentially be funding from the BIOT Administration for the joint preparation of a paper with GoSL DFAR and presentation of results at the annual Indian Ocean Tuna Commission Working Party on Ecosystems and Bycatch (IOTC WPEB). The BIOT Administration will also make data on IUU in BIOT available to the project for analysis in order to provide a characterisation and better understanding of the multiday fisheries.</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>
<p>Partner Name and website where available:</p> <p>The Shark Specialist Group of the International Union for Conservation of Nature (SSG – IUCN)</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>The Shark Specialist Group of the IUCN will be a collaborating partner in an information-sharing role. Data resulting from the project will be supplied to the IUCN SSG to contribute to the assessment of the conservation status of pelagic sharks and rays. The IUCN SSG will also assist the project by acting as a high-profile communicator of the project outputs to increase public awareness and will be involved in the final policy recommendation workshop to provide an international perspective.</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>

<p>Partner Name and website where available:</p> <p>International Seafood Sustainability Foundation (ISSF)</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>ISSF will be a collaborating partner in an information-sharing and awareness-raising role. ISSF plays a key role in influencing policy and public opinion related to tuna fisheries in the Indian Ocean, having commissioned a number of studies on the impacts of the fisheries. ISSF will participate in the final recommendations/policy development workshop to discuss the final recommendations for policy and will be involved in the dissemination of results to a wider international audience.</p>
<p>Have you included a Letter of Support from this institution?</p>	<p>Yes</p>

<p>11. Have you provided CVs for the senior team including the Project Leader</p>	<p>CVs are provided for the project leader and the key implementation team:</p> <p>Chris Mees (MRAG) Sarah Martin (MRAG) Timothy Davies (Imperial/MRAG) Robert Arthur (MRAG) John Pearce (MRAG) James Moir Clark (MRAG) Daniel Fernando (The Manta Trust) Rab Nawaz (WWF- Pakistan) Moazzam Khan (WWF- Pakistan) Umair Shahid (WWF- Pakistan)</p> <p>CVs of other project partners can be provided on request</p>
--	---

TECHNICAL EXCELLENCE

12. Problem the project is trying to address

Please describe the problem your project is trying to address. For example, what biodiversity and development challenges will the project address? Why are they relevant, for whom? How did you identify these problems?

(Max 200 words)

The depletion of fishery resources in the coastal waters of Sri Lanka has led to the rapid expansion of fishing activities further offshore characterised by multi-day boats targeting large pelagics. The multi-day fishery is associated with considerable elasmobranch catches, many of which are highly threatened by intense commercial and IUU fishing. Fishing within BIOT has reduced reef sharks by ~70% since the 1970s⁵, and elasmobranchs continue to be caught there in large numbers despite the MPA designation.

Current governance arrangements have not managed to control shark fishing and IUU in the region. To address this issue it is necessary to assist the GoSL to enhance the legal framework through the development of an NPOA on sharks and to build DFAR capacity to improve their governance of this fleet to regulate elasmobranch catches. Elasmobranchs represent an important resource to fishers dependent on them for their livelihoods as well as to groups who rely on the affordable source of protein for food security. Therefore it is important to engage with fishing communities to explore key challenges associated with declining elasmobranch populations and develop innovative, bottom-up solutions for local development and livelihood improvement while reducing pressure on elasmobranch resources.

13. Methodology

Describe the methods and approach you will use to achieve your intended outcomes 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).

⁵ Graham, N.A.J., Spalding, M.D. & Sheppard, C.R.C. (2010) Reef shark declines in remote atolls highlight the need for multi-faceted conservation action. *Aquatic Conservation: Marine and Freshwater Ecosystems* 20: 543-548.

(Max 500 words – repeat from Stage 1 with changes highlighted)

A key outcome of the project will be a series of policy recommendations for improved regional elasmobranch conservation while supporting and improving livelihoods of multi-day fishers. These recommendations will be based on work in the following three areas.

The existing strategic and practical capacity in DFAR to manage the multiday fleet is inadequate. This capacity will be developed through:

- Streamlining of specific data collection protocols and development of sampling strategies for elasmobranch catches to be stored in a centralised database
- Design of training courses in (i) elasmobranch catch sampling strategies and (ii) monitoring, control and surveillance (MCS)
- Training of DFAR staff in improved monitoring of sharks within the context of the current data collection and management schemes.

The extent and impact of Sri Lankan multiday vessels on elasmobranchs, including those fishing illegally inside BIOT, is poorly understood, as are the socio-economic drivers of elasmobranch fishing and the importance of the fisheries to the poor. To improve baseline knowledge this project will:

- Compile and analyse existing Sri Lankan elasmobranch landings data (e.g. official records, market surveys, BIOT arrest reports, interviews, logbooks)
- Undertake Participatory Rural Appraisals to explore the role of elasmobranch fishing in livelihoods and perceptions of changes that have taken place in the multiday fisheries over time, including changes in catches and targeting of elasmobranchs
- Undertake household surveys to investigate socio-economic characteristics and vulnerability of different groups associated with the fisheries.

Changes in elasmobranch catches due to declining populations or due to legislative changes are likely to affect fisher livelihoods. This project will explore innovative solutions to improving livelihoods while reducing pressure on pelagic elasmobranch resources through:

- Focus groups with multiday fishers to discuss key problems they face, their objectives for the improvement of the subsector and to discuss locally relevant opportunities for development and livelihoods support options
- Consensus-building workshops to bring together the various ideas for livelihood improvement schemes in focal communities. These will draw on a wide range of possible ideas, including those used by Fisheries Local Action Groups for small-scale fisheries systems in the EU.
- Implementation and evaluation of a number of selected pilot schemes

MRAG will manage the project against logframe and Gantt Chart tools. Its Managing Director will ensure quality control of project outputs. MRAG will work closely with Manta Trust, WWF and DFAR in data collection and capacity building tasks. DFAR and BIOT-A will provide data and jointly facilitate IOTC WPEB engagement; DFAR staff will undertake training programmes and will be closely involved in the development and implementation of improved data collection protocols. MRAG will also work closely with the IOTC during development of the catch sampling protocol, BOBLME in terms of research related to characterisation of the fisheries and with RFLP in developing the livelihoods work. All partners including fishers and international representatives will be involved in the final workshop to develop policy recommendations and

SSG and ISSF will be involved in disseminating the conclusions of the research to a wider audience beyond the Indian Ocean region.

14. Outcome

Detail what the expected outcomes of this work will be. The outcome should identify what will change and who will benefit. The outcome should refer to how the project will contribute to reducing poverty while contributing to sustainable development and management of biodiversity and its products. A summary statement of this outcome should be provided in question 4 and 24.

(Max 250 words)

1. The strategic and practical capacity of DFAR to manage and govern the multi-day fleet will be enhanced, resulting in improved compliance with international elasmobranch and biodiversity data reporting obligations and reduced IUU in BIOT. The IOTC-OFCF has increased the capacity to complete sampling at landing places, so this project will build on this through the enhancement of fisheries inspection capacity including verification of catches against logbooks, VMS data and other sources with particular attention given to elasmobranch catches and the monitoring and control of the multi-day fleet.
2. Livelihoods of fishing households will be supported through pilot livelihood improvement schemes and increased long-term livelihood and food security of fishing communities in Sri Lanka through improved elasmobranch conservation and identification of viable livelihoods improvement schemes for wide scale uptake.
3. Policy recommendations will be presented to DFAR on how to improve the sustainability of elasmobranch fishing in the multi-day fleet. Recommendations will be made on the basis of improved understanding of the drivers and importance of elasmobranch fishing to the poor, and will include a number of locally-developed, trialled and tested livelihood improvement schemes designed to reduce elasmobranch catches whilst improving livelihoods of fishers. This project will serve as a model for improved sustainability of pelagic elasmobranch fisheries through a combination of top down and bottom up approaches. The policy recommendations generated will be promoted on a wide scale for uptake by other IOTC members to improve the conservation of elasmobranchs across the region.

15a. Is this a new initiative or a development of existing work (funded through any source)? Please give details (Max 200 words):

This proposal describes a new project initiative, presenting original ideas and a newly developed strategy. Nevertheless, it builds on background work produced during a project funded by the Darwin Overseas Territories Challenge Fund completed jointly by MRAG Ltd and the Zoological Society of London related to strengthening management and conservation benefits from the BIOT management framework in the context of a marine protected area. The Project will also use the experience gained by other regional projects and programmes, in particular building on the data collection and management activities implemented with the support of the IOTC-OFCF Project.

The livelihoods aspects of this project will look to develop work completed by the Regional Fisheries Livelihoods Programme (RFLP), the 'sister' project to BOBLME. The RFLP project covers a number of countries in the region, but has undertaken a variety of initiatives in Sri Lanka, so will provide a key starting point for the development of the detailed programme of work, in order to ensure this project addresses key gaps in research and development opportunities. The RFLP will be ending in August 2013, so this project will continue and enhance livelihoods support in the area to complement the improved fisheries management and governance.

15b. Are you aware of any other individuals/organisations/ projects carrying out or applying for funding for similar work? Yes No

If yes, please give details explaining similarities and differences, and explaining how your work will be additional to this work and what attempts have been/will be made to co-operate with and learn lessons from such work for mutual benefits:

The Bay of Bengal Large Marine Ecosystem Project is a large programme of work on fisheries, critical habitats and pollution. Sri Lanka is one of eight Bay of Bengal countries involved. BOBMLE is working towards outcomes that are compatible with the proposed project, in particular, the development of a shark-NPOA. To inform this plan, targeted fisheries research is required to address knowledge gaps. This is an area to which this project will contribute, complementing the large scale approach with more detailed analyses to provide a greater understanding of the fisheries and provide key conclusions for strategy planning. The proposed work components of characterising the elasmobranch fisheries, improving data reporting and governance are highly supportive of BOBMLE objectives while not duplicating any activities.

The IOTC, in collaboration with OFCF, are currently working on a short-term project to improve the collection and management of data from tuna fisheries, ending in March 2013. This is part of a large-scale programme of work covering 16 countries, including catch monitoring activities in Sri Lanka, ending in March 2013. This proposal will act as a natural extension to this project in terms of generating improvements in the monitoring of catches of elasmobranchs, but will also add a novel component, engaging with fishing communities to both ensure the sustainability of changes in management and governance of the multi-day fishery and while supporting livelihoods within fishing communities.

This Darwin project will be fully embedded within the regional framework initiatives, but will provide a more focussed, intensive study in a smaller area, thereby providing more detailed understanding of the fisheries. The project will take place with the association of a wide array of partners, strengthening the collaborative participatory nature of the work with the aim to increase sustainability of the initiatives implemented and recommendations made. Shark by-catch is partially covered in the IOTC-OFCF workplan; this project will enhance this area and develop it more fully. As many initiatives end on completion of projects which have a short timeframe and where resources are spread thinly, this project will enable a longer-lasting benefit.

15c. Are you applying for funding relating to the proposed project from other sources? Yes No

If yes, please give brief details including when you expect to hear the result. Please ensure you include the figures requested in the spreadsheet as Unconfirmed funding.

16. Value for money

Please describe why you consider your application to be good value for money including justification of why the measures you will adopt will secure value for money?

(Max 250 words)

The highly collaborative nature of this project will ensure value for money for this project as well as the other initiatives it is linked to.

- The RFLP will provide key insight in to setting the direction of the socio-economic research and development of pilot livelihood and improvement schemes. This project will draw on the knowledge gained through the 4-year program and use the information as a scoping analysis. This will serve to highlight key issues and raise awareness of potential problems early on, and allow lessons to be learned from the experiences before the project has begun, saving a vast amount of time that would otherwise be needed.
- The establishment of a data collection and management system by IOTC-OFCF will provide the setting for this project to contribute to. Much of the ground work will be established, so this project will be able to focus specifically on enhancing the elasmobranch monitoring, data collection and management. IOTC will share training materials and ID guides.
- ISSF, IUCN & RFLP will provide expertise at the final workshop for free, covering their own costs to participate. BOBLME will be contributing funding towards the establishment of livelihood impact projects, and will be providing an expert at the inception and final workshops for free.
- The BIOT Administration will be donating data for free and will also potentially be contributing funding toward the development of a paper to be presented at the IOTC WPEB

17. Ethics

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

(Max 300 words)

DFAR have a key lead role in this project, having been involved since project inception. DFAR will maintain a leading role during the more detailed development and implementation phase, and once the project is completed, thereby continuing its legacy. This full participation from the national government of Sri Lanka will enable the project to meet legal and ethical obligations concerning fisheries and socio-economic research in Sri Lanka, ensuring that perspectives, interests and well-being of people directly involved in the project are properly addressed. The project will seek the Free and Prior Informed Consent of partner communities though DFAR before initiating the programme of work.

The rights and privacy of all households involved in socio-economic survey methods will be highly respected, so results will be present as anonymous and not infringe any aspects of privacy. Rigorous health and safety standards will be maintained during the catch monitoring programme and particularly as part of MCS training. The safety of DFAR staff and fishers will be considered key in the development of these courses.

This project will make use of the traditional and local ecological knowledge of fishers, combining these sources of knowledge explicitly with more formal data collection and analytical methods. This facet of the project is considered vital in achieving socially and culturally relevant outcomes of the project (i.e. policy recommendations). This will be used to characterise the

fisheries and to develop more detailed understanding of fisher behaviour.

Intellectual bias is minimised in this project through the multiple peer-review processes in place and the variety of backgrounds of project partners and stakeholders, including representatives from government, conservation organisations, fisheries management organisations and fishers themselves. This should help to maintain the intellectual integrity of the research in addition to more formal peer-review processes which will take place for the journal submitted articles.

PATHWAY TO IMPACT

18. Legacy

Please describe what you expect will change as a result of this project with regards to biodiversity conservation/sustainable use and poverty alleviation. For example, what will be the long term benefits (particularly for biodiversity and poor people) of the project in the host country or region and have you identified any potential problems to achieving these benefits?

(Max 300 words)

Current policy and legislation pertaining to shark and shark-related fisheries in Sri Lanka is extremely limited, so this project will play a key role in informing the development of long-term policy and legislation. Research related to the characterization of the elasmobranch fisheries will feed into the work being undertaken by BOBMLE to contribute to the formulation of a final NPOA and RPOA for sharks, thereby ensuring long-term impacts through policy. Regarding legislation, the timing of the project coincides with the proposed national ban on IUU to be implemented in early 2013. Capacity building of DFAR staff in MCS methods will be crucial to the long-term success of this legislative change which is otherwise likely to be ineffective.

Sri Lanka has annual data reporting requirements as a member of IOTC as well as a long-term commitment under CBD for the conservation and sustainable use of biological diversity. This project will enable the government of Sri Lanka to meet its long-term international commitments to IOTC and under CBD through the increased capacity of DFAR in data collection, management and governance of the fisheries. Stakeholder participation will be central to the development of both policy recommendations and pilot schemes. This participation will increase communication and trust, contributing to improve the overall relevance and sustainability of policy recommendations and livelihoods improvement schemes that are implemented.

Research will be firmly entrenched in regional development programmes. Coordination of work among regional and national organisations will strengthen the legacy of the project by ensuring that activities are maintained once the project is complete and will also serve to inform long-term regional policy. Successes in this project, in particular the stakeholder-driven development of pilot initiatives, will serve as a model for similar projects in other Indian Ocean coastal states where pelagic elasmobranch fishing is considered unsustainable.

19. Pathway to poverty alleviation

Please describe how your project will benefit poor people living in low-income countries. Projects are required to show how positive impact on poverty alleviation will be generated from your project in low-income countries. All projects funded under the Darwin Initiative in Round 19 must be compliant with the Overseas Development Assistance criteria as set out by the OECD. The outcomes of your research must at the very least provide insight into issues of importance in achieving poverty alleviation.

(Max 300 words) One of the primary goals of this project is that it will generate significant benefits for poor communities as part of its legacy. The project will achieve this aim both directly within the project time-frame and indirectly through longer-term contribution to conservation and research.

Fish contributes ~66% of the animal protein consumed in Sri Lanka and is key to regional food security, with demand for fish products exceeding supply. Although not usually considered a target species, sharks are utilised in a number of ways, with fins sold for export and meat salted and dried for local sale. As such, declining elasmobranch catches threaten both the fishers dependent on them for their livelihoods as well as the people who rely on salted shark as an affordable source of protein. Improvements in the sustainability of the multi-day fishery will therefore act to safeguard local livelihoods and food security. By involving local people in policy discussions it is anticipated that local evidence and innovation will inform national and regional development and conservation policies. This indirect contribution to poverty alleviation will be realised over a time period longer than the project lifetime based on the long-term impacts of the policy measures for the sustainable management of the fisheries resources.

The project will also directly enhance the welfare and economic development of poor people in Sri Lankan fishing communities through research that will identify groups who are most vulnerable to changes in the shark fisheries. Through participatory methods, the project will work with these people to investigate their dependencies and the opportunities and constraints they face related to income, employment and food security. This information will form the basis for developing innovative stakeholder-driven solutions to improve their welfare and resilience to current or future changes in the shark fisheries. In this way, poverty alleviation will be addressed directly in a small number of fishing communities, however larger-scale impacts will be obtained strategically through the evaluation of the success of the various pilot initiatives and wider promotion to other Indian Ocean low income and lower middle income countries.

20. 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?

(Max 200 words)

The project culminates with the development of policy and management recommendations, so can be considered to have a finite end point. Project activities will be developed with a view to minimize costs as much as possible so the activities will be continued by the GoSL beyond the project lifetime. This includes activities related to data collection and management and improved governance of IUU activity by DFAR. A large number of staff will be trained (30) at DFAR, so the retention of skills within the department is not dependent on very few individuals. Training materials will be donated to the department, so training courses may be re-run in the future and the monitoring protocols may be adapted over time.

Innovative stakeholder pilot initiatives may also continue beyond the end of the project. These will be designed to be sustainable and self-supporting, designed and led by local fishers with ideas for their local situation, so will require no further input by the project. If successful, these have the potential to be extrapolated down the coastline, and across the Indian Ocean region. Ongoing potential will be a key consideration during the review of pilot ideas, along with innovation, practicability, cost-benefit balance.

HIGHLY DESIRABLE

21. 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 there 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?

(Max 300 words)

While there is considerable amount of information regarding the decline of reef species in nearshore areas, there is less known about the status of pelagic elasmobranchs. The lack of information is severely restrictive to potential management interventions, and awareness of the potential worth of these species is low. This project will contribute to increased understanding of the fisheries through analysis of the biological catch data, and through social surveying methods to understand how they are fished and how fishing patterns have changed over time. This project will raise awareness related to project outcomes at the local, regional and international levels. Locally, the focus of pilot schemes will be to reduce pressure on elasmobranchs, so these schemes will need to be based on understanding of why the effort needs to be reduced.

At the regional level, the IOTC Working Party on Ecosystems and Bycatch will be interested in any new information related to the elasmobranch fisheries, demonstrating the ecosystem approach to fisheries management, presented in a working paper to the party. BOBLME will also be able to raise awareness of key project outputs at the regional level. Internationally, ISSF and IUCN will be able to disseminate key information to a wide audience in an accessible format, and the submission of a paper to a peer-reviewed journal will allow the detailed information to be available to a wide scientific audience. All disseminated information will clearly display the Darwin logo and identify the Darwin Initiative as the primary source of funding.

22. Importance of subject focus for this project

If your project is working on an area of biodiversity or biodiversity-development linkages that has had limited attention (both in the Darwin Initiative portfolio and in conservation in general) please give details.

(Max 250 words)

Research closely linked to policy and practice can play a crucial role in ensuring conservation of biodiversity whilst realising its potential as a 'driver of development' to reduce poverty. With limited capacity, complex and poorly understood ecosystem-poverty linkages, opportunities for realising the development potential of aquatic biodiversity conservation are missed. This leads to poor policy and practice, and further impoverishment. This is what the project will address by looking at the opportunities for reducing impact on biodiversity; identifying the potential for alternative pathways and linking the research closely to policy.

23. Leverage

a) 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.

Confirmed:

BOBLME will be providing funds towards the characterisation of the elasmobranch fisheries and development and implementation of pilot livelihood improvement schemes, and will be providing an expert at the inception and final workshops. The BIOT Administration will be contributing funding towards the development of a paper and attendance of a presenter at the 2015 Working Party on Ecosystems and Bycatch. ISSF, IUCN, IOTC and RFLP will provide expertise at the final workshop, covering their own costs to participate. DFAR staff will be highly involved in the project and will be contributing time under their normal salaried employment, providing staff to undertake data collection during all project phases and WWF-Pakistan and the Manta Trust will provide staff time for activities that overlap with their own programmes of work.

b) Unsecured

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

Date applied for	Donor organisation	Amount	Comments

PROJECT MONITORING AND EVALUATION

MEASURING IMPACT

24. LOGICAL FRAMEWORK

Darwin projects will be required to report against their progress towards their expected outputs and outcomes if funded. This section sets out the expected outputs and outcomes of your project, how you expect to measure progress against these and how we can verify this. Further detail is provided in Annex x of the guidance notes which you are encouraged to refer to. The information provided here will be transposed into a logframe should your project be successful in gaining funding from the Darwin Initiative. The use of the logframe is sometimes described in terms of the Logical Framework Approach, which is about applying clear, logical thought when seeking to tackle the complex and ever-changing challenges of poverty and need. In other words, it is about sensible planning.

Impact

The Impact is not intended to be achieved solely by the project. This is a higher-level situation that the project will contribute towards achieving. All Darwin projects are expected to contribute to poverty alleviation and sustainable use of biodiversity and its products.

(Max 100 words)

Elasmobranch conservation in the Indian Ocean is benefited from improved management of Sri Lankan multiday fisheries impacting highly migratory pelagic and reef elasmobranch species within the BIOT marine protected area and wider Indian Ocean. Long-term livelihood and food security of Sri Lankan communities involved in the multiday offshore fisheries will be enhanced through improved conservation of elasmobranchs and through pilot schemes

designed by communities to improve livelihoods through development and diversification. The project will contribute to the fulfilment of regional management measures adopted by the IOTC related to sharks.

Outcome

There can only be one Outcome for the project. The Outcome should identify what will change, and who will benefit. The Outcome should refer to how the project will contribute to reducing poverty and contribute to the sustainable use/conservation of biodiversity and its products. This should be a summary statement derived from the answer given to question 14.

(Max 100 words)

IUU within BIOT and the wider Indian Ocean reduced through the improved capacity of DFAR to manage and govern its multi-day fleet complying with international commitments and data reporting obligations under CBD, CMS and IOTC for biodiversity conservation. Livelihoods of fishing households sustainably improved through elasmobranch conservation and identification, development and wide-scale uptake promotion of viable livelihood improvement schemes following pilot livelihood initiatives to increase long-term livelihood and food security opportunities in selected communities. Policy recommendations on improvements to the sustainability of elasmobranch fishing in the multi-day fleet will be developed and promoted nationally and regionally including low income countries.

Measuring outcomes - indicators

Provide detail of what you will measure to assess your progress towards achieving this outcome. You should also be able to state what the change you expect to achieve as a result of this project i.e. the difference between the existing state and the expected end state. You may require multiple indicators to measure the outcome – if you have more than 3 indicators please just insert a row(s).

Indicator 1	National (and ongoing) elasmobranch catch monitoring and logbook scheme with a centralised database established by year 2.
Indicator 2	Enhanced capacity of DFAR to govern its fleet shown by a reduction in the number of arrests/cautions recorded in BIOT in year 2.
Indicator 3	Improved understanding of the characteristics of the elasmobranch fisheries, including the drivers of fishing behaviour and the importance elasmobranch catches to the poor by year 2.
Indicator 4	Success of livelihood improvement schemes demonstrated through improved welfare of at least 80% of households involved in the six pilot schemes.
Indicator 5	Uptake of proposed policy recommendations, including promotion of livelihood improvement schemes, by the GoSL by project end and where applicable, transferred to Pakistan and elsewhere by WWF-Pakistan by 2017.
Indicator 6	Promotion of policy recommendations to the IOTC at the 2015 WPEB and uptake of recommendations by IOTC members (including low income countries) by the 2017 IOTC Commission Meeting.

Verifying outcomes

Identify the source material the Darwin Initiative (and you) can use to verify the indicators provided. These are generally recorded details such as publications, surveys, project notes, reports, tapes, videos etc.

Indicator 1	Established databases containing catch records from year 1, training documents; final project report, DFAR annual reports and annual statistical reports
Indicator 2	BIOT Senior Fisheries Protection Officer reports; BIOT-A submissions to IOTC under IOTC Resolution 11/03 (Reporting IUU); IOTC Compliance Committee reports; Manta Trust and WWF ongoing capacity building project reports; final project report, meeting minutes, training participant workshop feedback forms, DFAR annual reports
Indicator 3	DFAR landing statistics, national statistical reports to IOTC and IOTC compiled catch and bycatch statistics, peer-reviewed publications, workshop reports, PRA summary outputs, household economic survey statistics, satisfaction survey results
Indicator 4	Focus group meeting minutes, pilot scheme final reports, base-line socio-economic surveys and follow-up surveys in selected households, including questions related to perception of changes in welfare due to pilot schemes, in year 3.
Indicator 5	DFAR annual reports, gazetted legislation, WWF Pakistan annual reports
Indicator 6	Joint BIOT-A/GoSL working paper presented to the IOTC WPEB; IOTC working party, Scientific Committee, Compliance Committee and Commission meeting reports and other IOTC contributed papers

Outcome risks and important assumptions

You will need to define the important assumptions, which are critical to the realisation of the *outcome and impact* of the project. It is important at this stage to ensure that these assumptions can be monitored since if these assumptions change, it may prevent you from achieving your expected outcome. If there are more than 3 assumptions please insert a row(s).

Assumption 1	GoSL remain committed to improving governance of its multiday fleet and reducing IUU.
Assumption 2	Sri Lanka remains relatively politically stable during the project period
Assumption 3	Natural disasters such as tsunamis do not affect fishing communities

Outputs

Outputs are the specific, direct deliverables of the project. These will provide the conditions necessary to achieve the Outcome. The logic of the chain from Output to Outcome therefore needs to be clear. If you have more than 3 outputs insert a row(s). It is advised to have less than 6 outputs since this level of detail can be provided at the activity level.

Output 1	Fully functioning elasmobranch data collection programme established that is harmonised with regional IOTC reporting requirements and increased strategic and practical capacity of the DFAR to govern its fleet of multiday vessels
Output 2	Improved understanding of elasmobranch fishing by Sri Lankan multiday fleet, including socio-economic drivers of elasmobranch fishing by the multiday fleet and the importance of shark catches to the poor .

Output 3	Implementation and evaluation of stakeholder developed pilot initiatives aimed at reducing elasmobranch catches whilst improving livelihoods fishing communities.
Output 4	Policy recommendations for DFAR on how to achieve sustainable management of elasmobranch catches in the multi-day fleet developed with stakeholders, including recommendations on eliminating IUU in the Chagos MPA; followed by promotion of recommendations to other IOTC members in the region

Measuring outputs

Provide detail of what you will measure to assess your progress towards achieving these outputs. You should also be able to state what the change you expect to achieve as a result of this project i.e. the difference between the existing state and the expected end state. You may require multiple indicators to measure each output – if you have more than 3 indicators please just insert a row(s).

Output 1	
Indicator 1	Log-book and catch sampling data collection system with a centralised database in place by year 2
Indicator 2	30 DFAR staff trained in elasmobranch catch monitoring methods and 10 senior DFAR staff trained in Monitoring Control and Surveillance methods by year 2
Indicator 3	GoSL fully compliant with regional fisheries reporting requirements for IOTC by year 2
Indicator 4	Reduction in number of Sri Lankan vessels arrested/cautioned in BIOT in year 3

Output 2	
Indicator 1	Analysis of the temporal and spatial distribution of catches of pelagic elasmobranch species and characterisation of the multiday fisheries by year 1
Indicator 2	Identification of key communities dependent on the pelagic elasmobranch fisheries and by mid year 2
Indicator 3	Evaluation of the role of elasmobranch fishing in rural livelihoods and analysis of the socio-economic drivers of elasmobranch fishing in Sri Lankan, including cultural and religious significance by mid year 2

Output 3	
Indicator 1	Identification of innovative and viable pilot livelihood improvement schemes ideas and communities interested in participating in pilot initiatives by mid year 2
Indicator 2	Initiation of 6 pilot livelihoods schemes by end of year 2
Indicator 3	Initial/ mid-term evaluations complete for 6 pilot livelihood improvement initiatives by mid year 3

Output 4	
Indicator 1	Workshop held with all project partners to analyse and discuss results from the biological and socio-economic research and the pilot study evaluations
Indicator 2	Synthesis of policy recommendations for DFAR and subsequent uptake of these policies by DFAR
Indicator 3	Promotion of policy recommendations at IOTC meetings

Verifying outputs

Identify the source material the Darwin Initiative (and you) can use to verify the indicators provided. These are generally recorded details such as publications, surveys, project notes, reports, tapes, videos etc.

Output 1	
Indicator 1	Annual fisheries statistics; report from DFAR submitted to IOTC
Indicator 2	Training materials for catch sampling (including species identification sheets), training materials for MCS, participant feedback from training sessions
Indicator 3	DFAR reports of elasmobranch catches; IOTC data collection working party reports in 2014/2015, Annual catch monitoring statistics report from DFAR
Indicator 4	BIOT Senior Fisheries Protection Officer reports; BIOT-A submissions to IOTC under IOTC Resolution 11/03 (Reporting IUU); IOTC Compliance Committee reports

Output 2	
Indicator 1	Project report; paper submission for peer-review; IOTC working paper report
Indicator 2	Project report; PRA reports
Indicator 3	Project report; paper submission for peer-review; focus group meeting minutes; household economic survey results.

Output 3	
Indicator 1	Project reports including a summary report of local focus groups held in each pilot community to develop ideas; minutes and a summary report of the consensus-building workshop
Indicator 2	Project reports documenting activities
Indicator 3	Feedback forms from household involved in pilot scheme; pilot scheme evaluation report, project reports

Output 4	
Indicator 1	Minutes of partner workshop; summary report of partner workshop outlining final agreed policy recommendations.
Indicator 2	Policy recommendation document, DFAR annual reports, gazetted legislation, WWF Pakistan annual reports
Indicator 3	Paper presented at 2015 Working Party on Ecosystems and Bycatch

Output risks and important assumptions

You will need to define the important assumptions, which are critical to the realisation of the achievement of your outputs. It is important at this stage to ensure that these assumptions can be monitored since if these assumptions change, it may prevent you from achieving your expected outcome. If there are more than 3 assumptions please insert a row(s).

Assumption 1	Sri Lanka remains relatively politically stable during the project period, ensuring in-country fieldwork, training and final workshops can be completed and beyond the project to continue rolling out the outputs.
Assumption 2	The selected fishing communities are interested in cooperating, being involved in the project and are willing to talk about the subject of IUU fishing.
Assumption 3	DFAR remain committed to the elasmobranch catch data collection and continue to participate in the data collection programme beyond the lifetime of the project.
Assumption 4	Governance activities such as MCS are not adversely affected by impacts beyond the control of the project such as piracy.

Activities

Define the tasks to be undertaken by the research team to produce the outputs. Activities should be designed in a way that their completion should be sufficient and indicators should not be necessary. Any risks and assumptions should also be taken into account during project design.

Output 1	
Activity 1.1	Develop extended data collection protocols and sampling strategies specific to elasmobranch catches but aligned with existing data collection protocols, including production and collation of regionally-relevant elasmobranch species identification sheets, in yr1 [MRAG, Manta Trust and WWF]
Activity 1.2	Design training courses in (i) elasmobranch catch sampling strategies [MRAG, Manta Trust and WWF] and (ii) MCS [MRAG] in yr1
Activity 1.3	Train DFAR field staff in newly developed elasmobranch catch sampling protocols [MRAG, WWF] and senior DFAR officials in MCS [MRAG] in yr 1

Output 2	
Activity 2.1	Compile and analyse existing Sri Lankan elasmobranch landings data (e.g. official records, market surveys, BIOT arrest reports, interviews) in yr1 [MRAG]
Activity 2.2	Participatory Appraisals to explore the role of the elasmobranch fisheries in livelihoods and analyse perceptions of changes that have taken place in the multiday fisheries over time, including changes in catches and targeting of elasmobranchs in yr 1 [MRAG, WWF]
Activity 2.3	Household surveys to investigate socio-economic characteristics of fishers involved in elasmobranch fishing and IUU in yr1 [MRAG, WWF, Manta Trust]
Activity 2.4	Submit peer review paper reporting on the above research findings by yr 2 [MRAG]

Output 3	
Activity 3.1	Focus groups with multiday fishers to discuss key problems fishers face, objectives for the improvement of the subsector, locally relevant opportunities for development and livelihoods support options in yr2 [MRAG, WWF]
Activity 3.2	Consensus-building workshops to bring together the various ideas for elasmobranch catch reduction and livelihood improvement schemes in each focal community, early yr 2 [MRAG]
Activity 3.3	Implement selected pilot schemes in mid yr 2 [MRAG,WWF]
Activity 3.4	Evaluation of schemes at mid-stage in yr3, including a review workshops held within each pilot community [MRAG,WWF]
Activity 3.5	Organise workshop with invited key experts to review and evaluate successes and failures of pilot schemes in yr 3 [MRAG, WWF]
Activity 3.6	Submit working party report on evaluation of pilot studies to IOTC

Output 4	
Activity 4.1	Organise workshop with all project partners to review findings and generate policy recommendations in yr3 [all partners]
Activity 4.2	Attend IOTC WPEB meeting to present policy recommendations in yr3 [MRAG]

25. Provide a project implementation timetable that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project.

Activity	No of Months	Year 1				Year 2				Year 3			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1													
1.1 Develop extended data collection protocols and sampling strategies specific to elasmobranch catches but aligned with existing data collection protocols, including production and collation of regionally-relevant elasmobranch species identification sheets, in yr1 [MRAG, Manta Trust and WWF]	2												
1.2 Design training courses in (i) elasmobranch catch sampling strategies [MRAG, Manta Trust and WWF] and (ii) MCS [MRAG] in yr 1	1												
1.3 Train DFAR field staff in newly developed elasmobranch catch sampling protocols [MRAG, WWF] and senior DFAR officials in MCS [MRAG] in yr 1	3												
Output 2													
2.1 Compile and analyse existing Sri Lankan elasmobranch landings data (e.g. official records, market surveys, BIOT arrest reports, interviews) in yr1 [MRAG]	2												
2.2 Participatory Rural Appraisals to explore the role of the elasmobranch fisheries in livelihoods and analyse perceptions of changes that have taken place in the multiday fisheries over time, including changes in catches and targeting of elasmobranchs in yr 1 [MRAG, WWF]	3												
2.3 Household surveys to investigate socio-economic characteristics of fishers involved in elasmobranch fishing and IUU in yr 1 [MRAG, WWF, Manta Trust]	6												
2.4 Submit peer review paper reporting on the above research findings in yr 2 [MRAG]	3												
Output 3													
3.1 Focus groups with multiday fishers to discuss key problems	2												

26. Project based monitoring and evaluation

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 projects monitoring and evaluation. 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. Monitoring and evaluation 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.

(Max 500 words)

Quarterly monitoring against logframe indicators and time line will be the responsibility of the project leader, Dr Mees. Feedback from monitoring activities will be utilised to adjust the activities accordingly and to ensure that the project remains able to deliver its objectives.

Monitoring and evaluation is fundamental to the success of the pilot livelihoods improvement schemes. This phase of the project will be highly adaptive and participatory. The pilot schemes will be organised, innovative designs, potentially building on tested ideas from Fisheries Local Action Groups in the EU, but will be specific to each local situation. As these will all be pilots, it is expected that some will be more successful than others and in a number of different ways. Comprehensive monitoring of these schemes at key stages during their implementation will allow problems and issues to be identified and address early on so that any necessary adaptive actions can take place as soon as necessary and the schemes can continue.

The success of these schemes will be evaluated with respect to a list of defined objectives determined at the outset of development, and evaluation will take place at a number of different levels. First, and most crucially, it will be rated by fishers and their households via feedback workshops mid-way through the pilot and again at the culmination of the schemes. This feedback, along with actual results (e.g. % change in perceived household welfare during pilot lifetime) will then be presented to, and analysed by, project partners who will be able to provide a broader perspective on the perceived successes and failures compared with similar initiative globally.

The range of pilots will be compared with each other through presentation of the results from feedback both qualitatively and quantitatively through cost-benefit and cost-effectiveness analyses. These will be reviewed at the final workshop, and the implications for policy will be discussed. This might include the suggestion that one or two initiatives that were particularly successful should be rolled out nationally or regionally, or it might be the conclusion that improvement initiatives have to be highly specific to a local situation in order to be successful and that there is no one-size-fits-all approach. The outcome of this will be entirely dependent on the results from monitoring and review of the pilots.

Training courses in both catch monitoring and MCS will require thorough review in order to assess their effectiveness. This will take place in the form of participant feedback forms to document perception as to the utility of the training. This will take place on completion of the training course and 3 months later to assess whether views are maintained once the training has been put into practice. The impact of training will also be monitored through a short exam to assess how much learning has been gained. Long-term impacts will also be monitored an analysis of the level of IUU fishing undertaken by Sri Lankan vessels and the level of fisheries control exercised by Sri Lanka.

FUNDING AND BUDGET

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

NB: Please state all costs by financial year (1 April to 31 March) and in GBP. **Budgets submitted in other currencies will not be accepted.** Use current prices – and include anticipated inflation, as appropriate, up to 3% per annum. The Darwin Initiative cannot agree any increase in grants once awarded.

27. 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.

(max 300 words)

MRAG has managed over 400 projects many with multiple partners. An MRAG Director assigned to every project provides quality control. This experience means we are able to provide innovative project solutions providing excellent, quality of services at a competitive cost. MRAG Ltd is a consultancy firm and so charges a rate for consultants with no overhead costs.

MRAG will provide MCS training materials which have already been produced, saving project costs. Budget accommodation will be utilised; food and transport costs will also be minimised through local networking. All implementing partners have previous in-country experience, reducing the need for background research. Collaboration with regional and national partners will produce efficiencies of staff time and shared resources in addition to ensuring outputs are more sustainable and relevant.

, A lump sum of £5,000 has been reserved to spend on each community initiative (development of pilot livelihoods improvement schemes). These cannot be explicitly budgeted as they may include a combination of capital and operating costs dependent on the nature of the scheme developed; these costs have been allocated between the two categories in the budget.

DFAR will provide a number of staff who will be contributing time under normal salaried employment to undertake data collection during all project phases. During training courses, DFAR staff will be paid a per diem, subsistence and travel costs. Manta Trust will provide expertise in ray identification and the overlap in catch monitoring activities of their programme provides cost savings. A PhD student will be working simultaneously on the project, providing time (catch-monitoring and training) for free, and will be providing low-cost, high quality, inputs into other project areas. WWF-Pakistan will provide staff time in kind and will also be providing shark ID guides developed in Pakistan.

Other matched and in kind contributions are identified in box 16.

FCO NOTIFICATIONS

Please check 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.

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

Yes (no written advice) **Yes, advice attached** **No**

CERTIFICATION 2013/14

On behalf of the company* of MRAG Ltd


I apply for a grant of £296,233 in respect of **all expenditure** to be incurred during the lifetime of this project based on the activities and dates specified in the above application.

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 lead institution to submit applications and sign contracts on their behalf.*)

I enclose CVs for project principals and letters of support. Our most recent audited/independently verified accounts and annual report are also enclosed

Name (block capitals)	DR CHRISTOPHER MEES
Position in the organisation	MANAGING DIRECTOR

Signed



Date:

3.12.2012

Stage 2 Application - Checklist for submission

	Check
Have you provided actual start and end dates for your project?	Y
Have you provided your budget based on UK government financial years i.e. 1 April – 31 March and in GBP?	Y
Have you checked that your budget is complete , correctly adds up and that you have included the correct final total on the top page of the application?	Y
Has your application been signed by a suitably authorised individual? (clear electronic or scanned signatures are acceptable in the email)	Y
Have you included a 1 page CV for all the Principals identified at Question 7?	Y
Have you included a letter of support from the <u>main</u> partner(s) organisations identified at Question 10?	Y
Have you checked with the FCO in the project country/ies and have you included any evidence of this?	Y
Have you included a copy of the last 2 years annual report and accounts for the lead organisation? An electronic link to a website is acceptable.	Y
Have you read the Guidance Notes?	Y
Have you checked the Darwin website immediately prior to submission to ensure there are no late updates?	Y

Once you have answered the questions above, please submit the application, not later than midnight GMT on Monday 3 December 2012 to Darwin-Applications@ltsi.co.uk using the application number (from your Stage 1 feedback letter) and the first few words of the project title **as the subject of your email**. If you are e-mailing supporting documentation separately please include in the subject line an indication of the number of e-mails you are sending (eg whether the e-mail is 1 of 2, 2 of 3 etc). You are not required to send a hard copy.

DATA PROTECTION ACT 1998: Applicants for grant funding must agree to any disclosure or exchange of information supplied on the application form (including the content of a declaration or undertaking) which the Department considers necessary for the administration, evaluation, monitoring and publicising of the Darwin Initiative. Application form data will also be held by contractors dealing with Darwin Initiative monitoring and evaluation. It is the responsibility of applicants to ensure that personal data can be supplied to the Department for the uses described in this paragraph. A completed application form will be taken as an agreement by the applicant and the grant/award recipient also to the following:- putting certain details (ie name, contact details and location of project work) on the Darwin Initiative and Defra websites (details relating to financial awards will not be put on the websites if requested in writing by the grant/award recipient); using personal data for the Darwin Initiative postal circulation list; and sending data to Foreign and Commonwealth Office posts outside the United Kingdom, including posts outside the European Economic Area. Confidential information relating to the project or its results and any personal data may be released on request, including under the Environmental Information Regulations, the code of Practice on Access to Government Information and the Freedom of Information Act 2000.