



## Darwin Initiative Main/Post/D+ Project Half Year Report (due 31 October 2016)

<b>Project Ref No</b>	21-019
<b>Project Title</b>	Strengthening marine protected areas and marine ecotourism benefits in Sudan
<b>Country(ies)/Territory(ies)</b>	Sudan
<b>Lead Organisation</b>	Equipe Cousteau
<b>Partner(s)</b>	Wildlife General Administration; Red Sea University; Sudan Development Initiative (SUDIA)
<b>Project Leader</b>	Tarik Chekchak
<b>Report date and number (e.g., HYR3)</b>	HYR3
<b>Project website/ Twitter/ Blog/ Instagram etc</b>	<a href="http://www.cousteau.org/projects/protect-sharks-and-rays-of-the-red-sea/">http://www.cousteau.org/projects/protect-sharks-and-rays-of-the-red-sea/</a>
<b>Funder (DFID/Defra)</b>	Defra

### 1. Outline progress over the last 6 months (April – Sept) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up to end September).

The following report describes progress on the Darwin Initiative project “**Strengthening marine protected areas and marine ecotourism benefits in Sudan**” from April 2016 to October 2016. The most significant news during the past 6 months was been the successful enlisting of the Sudanese marine protected areas as the first marine World Heritage site in the Red Sea. While the national Sudanese Man And Biosphere (MAB) committee was responsible for leading this important process, the project provided technical support, notably by organising a workshop in Paris at UNESCO HQ in February 2016, which provided the opportunity to discuss the outstanding values of the area and scientific partnerships, and fill the data gaps about sharks and rays and the potential for ecotourism development. The listing of the parks as a marine World Heritage site, has raised the international and regional profile of these important areas, thereby contributing to the overall goal and outcomes of the project.

Despite this success, certain activities have still been on hold due to the fact that the DI project team and Sudanese counterparts have been unable to obtain the security permits needed to undertake field work as explained in the previous reports. The team has been working hard to solve to this challenge and MOUs were signed between Cousteau and the Red Sea University (RSU) for the DI project and between Cousteau and the Red Sea State (RSS).

The MOU with the RSU signed in Paris in February 2016 establishes the arrangements for the scientific activities planned for implementation under the DI project to be done in partnership with the RSU. The MOU with the RSS establishes the arrangements for the community based livelihood activities, through a specific partnership with the RSS Ministry of Tourism and Environment (RSS-MTE).

These MOU also establish the arrangements for the provision of training of RSU and RSS-MTE staff (e.g. coral reefs, elasmobranchs) and the arrangements with regards equipment, data sharing, and the publishing of scientific results. Both the Wally of the RSS and the Dean of Marine Sciences were confident that these MOUs will help alleviate the security issues that the project has been facing.

Unfortunately, despite these efforts the security issue remains unresolved. Tarik Chekchak

visited Sudan between 12<sup>th</sup> October and 16<sup>th</sup> October 2016. During this visit he met with the new Director for the WCGA in Khartoum, the Sudanese MAB Committee, the British High Commission, the Future University. A scheduled meeting arranged by SUDIA with the responsible persons at security in Khartoum for the Project manager (Tarik) during his visit was postponed at the last minute. The meeting eventually took place in Khartoum in which assurances were made that the matter will be resolved in the coming weeks. A second meeting with the head of security in Port Sudan was also arranged via their headquarters in Khartoum, and the SUDIA representative was again assured that the obstacles would be addressed in the coming weeks and that Port Sudan was working closely with Khartoum on this issue.

### **Output 1:**

The following provides an update on progress on the activities under Output 1 between April-October 2016.

#### **1.1 A community visioning workshop for the Dungonab Bay Marine Park,**

The **First Meeting of the Advisory Committee for the Conference on the Future of Sudan's Marine Protected Areas (MPAs)** was held on 5th July 2015. The outline concept for the conference is attached to this report (see **Annex 21-019 Output 1.1\_01**).

The **Second Meeting of the Advisory Committee for the Conference on Future of Sudan's MPAs** was held on 20th September 2015. The minutes from this meeting are attached (**Annex 21-019 Output 1.1\_02**).

#### **1.2 Renovation of existing building to serve as both a ranger station and a visitors centre**

Following the field visit described in the YR1 report, a committee comprised of SUDIA Project Operations Officer, a representative from the Wildlife Conservation General Administration and an engineer from the Ministry of Interior reviewed and selected the winning bid for this work. A contract was drawn up and the work was scheduled for Q2/2015 (**21-019 Output 1.2\_01**). The work was put on hold pending the resolution of the security issues and was expected to commence in Q1/2016.

As reported in ARY2 the WCGA was successful in securing additional funds from Federal government and has commenced some of the needed renovation works. Since then the PERSGA Strategic Ecosystem Based Management project has also offered additional funding for the renovation of the WCGA buildings in Mohammed Qol.

During a meeting in October 2016 between the new director of WCGA and the project manager, the WCGA requested that the project consider reallocating the budget for the renovations to another activity to cover capital cost investments in surveillance and safety equipment for the rangers, especially hand and long range VHF/UHF radios, binoculars and hand GPS. A specific list of required equipment is currently prepared and a formal change request will be submitted accordingly.

#### **1.3 Procuring small vessels and other equipment needed for monitoring, control and surveillance.**

Quotes for the purchase of two (2) boats equipped with outboard engines (**Annex 21-019 Output 1.3\_01**) were solicited and an Egyptian vendor was selected. A purchase order was issued with delivery of the boats scheduled for Q2/2015. The purchase order was placed on hold until the project resolved the security issues. WCGA requested that the project purchase a fibre-glass boat with an outboard engine that were produced locally in Sudan instead of the semi-rigid inflatables as Wildlife Officers are already familiar with these types of boats. A new purchase order was prepared (**21-019 Output 1.3\_02**) and one of the boats and an engine has now been delivered to the WCGA in Port Sudan (see **21-019 Output 1.3\_03**).

As mentioned above, the project team would like to reallocate part of the remaining budget to cover additional surveillance, safety and communication equipment (anchor, life jackets, first aid kit, boat box with basic tools and flares, VHF radios, GPS). A specific list of required equipment is currently prepared and a formal change request will be submitted accordingly.

#### **1.4 Zoning plan for DMNP updated to include additional biodiversity hotspots identified using the results of scientific elasmobranch telemetry work by the end of the project.**

The draft zoning plan for DMNP is under preparation. The zoning categories have been defined (**21-019 Output 1.4\_01**) and some initial maps have been prepared for high priority threatened species for coral reefs, seagrass, dugong, mantas and turtles (**21-019 Output 1.4\_02**), based upon existing data and participatory mapping results. Before these zones can be finalised, the team will need to obtain the security permissions to be able to go back into the field to discuss these zones with the local communities to seek their agreement before they are formally agreed. If we are unable to do this then staff from the RSU will be asked to help facilitate these discussions with the local communities.

#### **1.5 Meeting with WCGA Officers at the start and end of the project to complete MPA Management Effectiveness Assessments (using WWF-World Bank Scorecard method or equivalent).**

The WCGA staff completed the MPA Scorecard for Dungonab Bay and Mukkawar Island National Park and the total score achieved was 21% in January 2015 (**21-019 Output 1.5\_01**). The MPA Scorecard was repeated in January 2016 by the DI project team (**21-019 Output 1.5\_02**). The results show that the overall score for management effectiveness has doubled over the past year, increasing from the initial score of 21% in January 2015 to 43% in January 2016. The MPA Scorecard will be repeated again in Y3 (2017) and the results submitted with the AR3 report.

### **Output 2**

The following provides an update on progress on the activities under Output 2 between April-October 2015.

#### **2.1 Acoustic telemetry equipment procured and shipped to Sudan and deployed in-water in Year 1 and maintained through Year 3. Focal species tagged in Year 1 and 2.**

The situation remains unchanged since the last report AR2. It has not been possible to service and redeploy the VR2W monitors as field phase that was planned for 2016 had not yet happened feasible due to the security permissions. It was hoped that the MOU formalising the arrangements with the RSU with regards fieldwork that was signed on 25th February 2016 (**21-019 Output 2.1\_01**) would resolve this issue but the security permissions have still not been agreed. If the international DI project team are not able to obtain the formal permission to undertake this field visit, the staff from the RSU will be tasked with recovering the monitors and the data. The DI project team still remains hopeful that this will be resolved very soon given the recent discussions.

#### **2.2. Continuous data derived on spatial movements, residency, home range and migration patterns of focal flagship elasmobranch species through telemetry techniques.**

The situation remains unchanged since the last report AR2, as with 2.1 above. The plan was for this activity to be implemented jointly by the DI project in partnership with the Red Sea University as per the new MOU that was signed on 25th February 2016 (**21-019 Output 2.1\_01**). If the international DI project team are not able to obtain the formal permission to undertake this field visit, the staff from the RSU will be tasked with recovering the monitors and the data. The DI project team still remains hopeful that this will be resolved very soon given the recent discussions.

#### **2.3. Training of Sudanese partners in telemetry field methods for elasmobranchs (x3), telemetry array maintenance and data download and organisation.**

The situation remains unchanged since the last report AR2, as with 2.1 and 2.2 above. The training in telemetry was to be provided to students / staff at the Red Sea University as per the new MOU that was signed on 25th February 2016 (**21-019 Output 2.1\_01**). The plan was to deliver a training course at the RSU to provide the opportunity for more staff / students to learn about these techniques through a combination of lectures and lab-based practicals to be followed by field surveys. If the international DI project team are not able to obtain the formal

permission to undertake this field visit, it will not be possible to provide this training. The DI project team still remains hopeful that this will be resolved very soon given the recent discussions.

#### **2.4. Data compilation, analysis and reporting of elasmobranch movement data (telemetry).**

The data on manta ray movement patterns that were obtained from the satellite tagged mantas has been analysed and since the AR2 report a new paper has been prepared for submission to an international journal (**21-019 Output 2.4\_01**). The data on the bottom monitors needs to be downloaded. Other activities pending the completion of 2.1-2.3.

#### **2.5. At least 50% of dive operators (5 out of the 10 companies) currently operating in Sudan reporting daily results to Divers Aware of Sharks (DAS) monitoring programme by end of Year 1 and continuing through to Year 3.**

Three dive operators are continuing to collect data for the DAS surveys. A Master student from the University of Cardiff (UK) compiled the existing DAS data and has now completed and been awarded his MSc. Additional data has recently been obtained from the dive operators and these data are now in the process of being analysed and the results will be submitted with AR3.

#### **2.6. Sudanese staff member regularly liaising with dive operators and collecting DAS results.**

The staff member was identified and employed until May 2015. The TOR for this staff member is provided in **Annex 21-019 Output 2.6\_01**. His contract was suspended when the obstacles presented themselves and an alternative more senior SUDIA staff member has been fulfilling this role in the interim in order to assist in resolving the issues with security supported by a part time staff member based in Port Sudan. In addition to this one of the staff members from the RSU has been tasked with supporting a number of the activities.

#### **2.7. 4 x WCGA Officers / Students trained and qualified SCUBA divers by the end of Year 1 and able to participate in monitoring surveys in Year 2 and 3.**

4 x WCGA Officers and 3 x students from the Red Sea University were trained in SCUBA diving. The training was completed in October 2015, and all students have been certified as PADI open water divers. Photographs of the training are provided in **Annex 21-019 Output 2.7\_01** and the training certificates are provided in **Annex 21-019 Output 2.7\_02**.

#### **2.8. 4 x Sudanese nationals trained in Year 1 and able to implement coral reef monitoring surveys by end of Year 3.**

The situation remains unchanged since the last report AR2. The plan was to run this training during the next field survey in Q2 2016. This field mission has not been possible due to the ongoing issue with obtaining the security permissions. The DI project team still remains hopeful that this will be resolved very soon given the recent discussions.

#### **2.9 Data compilation, analysis and reporting of coral reef monitoring surveys.**

Archive field data have been compiled and catalogued. Although not specifically mentioned in the DI project document, this work has variously included transferring the old video survey data that was stored in on Hi8 and microCV tape format into digital formats to ensure that they are more easily accessible and organising the other datasets.

#### **2.10. Preparation of geodatabase to consolidate existing and new monitoring datasets (e.g. DAS data, telemetry data, coral reef monitoring etc), and satellite derived environmental characteristics (e.g. sea surface temperature, chlorophyll) providing the basis for spatial planning and re-zoning of DMNP.**

A geodatabase has been prepared and the process of populating the geodatabase with the archived coral reef monitoring data and other already available spatial datasets has commenced. In addition to this, a time of series different remotely sensed satellite data showing different environmental has also been downloaded and organised. These datasets were used to provide the basis for the preparation of the Final Draft Management Plan for Dungonab Bay and Mukkawar Island National Park, which was completed in 2016.

In addition to this an introductory training course in the freeware software QGIS was delivered

at the Future University in Khartoum (**21-019 Output 2.10\_01**). The plan is to run a second training course using the data compiled during the project in 2017.

### **Output 3.**

The following provides an update on progress on the activities under Output 3 between April-October 2016.

#### **3.1. Field visit to refine coastal livelihood assessment**

The field visit was completed by four people and the project operations officer and project director between January and February 2015. The report from this assessment is now completed (**21-019 Output 3.1\_01**).

#### **3.2 Business plans for nature-based ecotourism livelihood opportunities**

A number of potential nature-based and eco-friendly development options have been identified. An ecotourism consultant was recruited to consult on these concepts and to further develop them into business plans for nature-based ecotourism livelihoods. The terms of reference for the consultant to prepare these business plans is included in **21-019 Output 3.2\_01**.

The tourism consultant ran a 4-day Sustainable Tourism Training Workshop between 20<sup>th</sup> to 23<sup>rd</sup> March 2016 at the El Khabeer International Conference Hall of The Red Sea University in Port Sudan. The workshop report, attendance list and training certificates are included in **21-019 Output 3.2\_02**. The training course materials presented during the workshop are presented in **21-019 Output 3.2\_03**.

#### **3.3 Develop ecotourism guidelines and deliver training to familiarise WCGA rangers, dive operators and local communities with guidelines**

The ecotourism guidelines have been drafted in English for manta rays, sharks, dugongs, and sea turtles (**21-019 Output 3.3\_01**). These have been submitted to the design agency and for translation into French and Arabic. The guidelines will also be used to prepare a short infographic powerpoint presentation for use in the training dive operators and local communities.

An educational video has been prepared about the World Heritage Site (**21-019 Output 3.3\_02**) which will be made available on the website. Once the final version of the film is ready the DI team will approach the international (e.g. FlyDubai and EgyptAir) and domestic airlines that land in Port Sudan to see if they would be willing to show the educational film before landing.

#### **3.4 Support the development of community-based initiatives that deliver collaborative livelihoods and income generating activities (through access to microfinance).**

The situation remains unchanged since the last report AR2.

### **Output 4:**

The following provides an update on progress on the activities under Output 4 between April-October 2016.

#### **4.1 Sudanese staff recruited and trained to lead day-to-day project activities and communications with stakeholders.**

A Sudanese staff member was contracted as Operations Officer as of January 2015. The job description for the staff member is attached as an annex to this report (**21-019 Output 4.1\_01**).

#### **4.2 Bi-annual Project Steering Committee meetings for Darwin Project to discuss project progress and monitor delivery.**

The SUDIA Director, Abdel-Rahman El Mahdi and a senior staff member Ahmed Hanafi have been holding Steering Committee meetings with relevant stakeholder to discuss the organisation of the conference.

#### **4.3 Preparation of bi-annual Darwin Initiative Project reports.**

This report constitutes the projects third half year report (HYR3).

**4.4 Annual Stakeholder Workshops held with a broad group of stakeholders to keep them up to date on Darwin Initiative project findings (x3)**

Please see Output 1, Activity 1.1. Also please refer to **21-019 Output 4.4\_01** and **21-019 Output 4.4\_02** for the meeting report from the UNESCO Workshop.

**4.5 Prepare a poster summarising key project outcomes for distribution to dive operators and other organisations in Red Sea State of Sudan.**

A poster was prepared explaining about the MPAs in Sudan. 10 copies of this poster were printed and distributed to key stakeholders in Sudan (**21-019 Output 4.5\_01**). Since now the area has been enlisted as a UNESCO World Heritage site, a new poster and other communication materials, including the ecotourism guidelines, are being prepared for distribution for use in a communication campaign highlighting this achievement.

**4.6 Prepare scientific paper(s) for submission to peer-reviewed journals and present findings at international conference.**

A short correspondence was published in Nature in October 2014 highlighting the issues facing the conservation of biodiversity in politically unstable regions, resulting from conversations with Wildlife Conservation General Administration staff in Khartoum (May 2014).

Hussey et al. (2014) Conservation: Sanctions derail wildlife protection, Nature, 514, 305.

**(Annex 21-019 Output 4.6\_01)**

Following this the DI Project team members have also published another review paper on animal telemetry in the aquatic environments.

Hussey et al. (2015) "Aquatic animal telemetry: A panoramic window into the underwater world" Science. 34 (6240) 1255641-1.

**(Annex 21-019 Output 4.6\_02)**

**4.7 Prepare media statements and popular articles to communicate interesting findings/actions to national, regional, and international newspapers and TV.**

An initial press release has been prepared and shared with key media. A radio interview broadcast was organized with one of the local FM Radio channels in Khartoum State. Interest has been expressed by the BBC and Aljazeera to cover the fieldwork. A leaflet presenting the project in English and Arabic has been prepared and distributed to key stakeholders (**Annex 21-019 Output 4.7\_01**). TORs have been prepared to recruit a national specialist to launch a full communication campaign to increase awareness of the designation of the MPAs as a World Heritage site (**21-019 Output 4.7\_02**).

**4.8 Prepare dedicated project website to disseminate project news/results, and broadcast updates using social media (Twitter, Facebook).**

The web site has been prepared and is currently updated to include key new information about the World Heritage enlisting and the work done under PERSGA project. We are in the process of getting approval of the content by all the governmental stakeholders (WCGA, Red Sea State, NARCOM / MAB Committee). The website and the short advertising video will be publically released during the first step of the communication campaign in December 2016.

**2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.**

The project team held several meetings with security forces and governmental agencies, signed new MoU, etc, mainly to try to solve the recurrent problem of having security permission to work on the field. Without exception, all the meetings were friendly and encouraging, but nevertheless we have always been confronted with the same problem when trying to send our

staff into the field.

Even though we have succeeded in delivering some training, improved the management framework of the marine protected areas and helped to raise the international profile of our study area, we are still missing access to the field and some important information. Different explanations have been provided, but the main driver is certainly the general political situation in Sudan, where the security forces are highly reluctant to see NGOs, foreign as well as local, having a direct access to the field and to some local communities. The other issue is related to the political situation in the wider region. The remote geographical location of Dungonab is within an area of genuine concern for the security forces. The area is on a human migration route, where people from countries to the south are trying to migrate northwards. It is also very close to the disputed border territories with Egypt. As the situation in the region remains unstable these factors are having an indirect influence on project outcomes.

Our local key partner, the NGO SUDIA, is well respected in Sudan but is also confronted with some administrative pressure from the security forces, and lead other socio-economic activities in Darfur and other areas of Sudan, so is under a careful watch. As an international and well known NGO, Cousteau is also facing a mixed of interest and suspicion from the security, especially when our technology involves tagging, remote sensing and satellite based mapping.

The project team have played an important role in facilitating the UNESCO World Heritage listing. While National MAB Committee led the process, our involvement certainly helped. It also helped to change the way the security may perceive our involvement in Sudan. We are planning to use the upcoming communication campaign to strengthen this sentiment before the end of the project.

This issue has been discussed in details with the United Kingdom Embassy in Khartoum, and they are keen to offer their support in the Red Sea State. But since this could be also counterproductive, we need to continue to maintain the dialogue and talk directly with the security.

In addition to this, the successful completion of the National Dialogue in Sudan, is currently also changing the way security forces consider the work of NGOs. It is anticipated that this will also help to resolve the challenges the project has been facing until now.

**2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?**

Discussed with LTS: **Yes/No**

Formal change request submitted: **Yes/No**

Received confirmation of change acceptance **Yes/No**

**3a. Do you currently expect to have any significant (e.g., more than £5,000) underspend in your budget for this year?**

**Yes**  **No**  Estimated underspend: £

**3b. If yes, then you need to consider your project budget needs carefully.** Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project please submit a rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget so please ensure you have enough time to make appropriate changes if necessary.

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<b>4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?</b>
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If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also** be raised with LTS International through a Change Request.

Please send your **completed report by email** to Eilidh Young at [Darwin-Projects@ltsi.co.uk](mailto:Darwin-Projects@ltsi.co.uk) . The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g., Subject: 22-035 Darwin Half Year Report**