

**Darwin Initiative/D+ Project  
Half Year Report  
(due 31<sup>st</sup> October 2019)**

<b>Project reference</b>	26-025
<b>Project title</b>	Eco-village approach to enhance socio-ecological resilience in Cabo Verde
<b>Country(ies)/territory(ies)</b>	Cabo Verde
<b>Lead organisation</b>	University of Cabo Verde (UniCV)
<b>Partner(s)</b>	Cabo Verdean Ecotourism Association (ECOCV), Cabo Verde National Directorate of the Environment (DNA), Cabo Verde Bangor University, Ocean Science School, UK Association for the Development of Sao Francisco - ADSF Civil Movement '350 Cabo Verde' Cooperative Society for the responsible tourism, Italy 'ViaggieMiraggi'
<b>Project leader</b>	<b><i>Mara de Castro Abu-Raya</i></b>
<b>Report date and number (e.g. HYR3)</b>	<i>HYR1</i>
<b>Project website/blog/social media etc.</b>	<a href="https://web.facebook.com/raizazulcabo Verde/">https://web.facebook.com/raizazulcabo Verde/</a>

**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).**

**Output 1**

**A 1.1 May-August.** Domestic waste assessment was conducted in the 4 target communities: São Francisco; Gouveia, Porto Mosquito and Porto Rincão. Two methods were used: macro waste assessment in the local waste accumulation sites, and specifically developed questionnaires to assess the level of awareness and waste disposal methods on the household and community levels. In total 98 people were interviewed in all target communities. The report has been produced with the results of the both surveys. Drone/ aerial surveys were run to aid the mapping of the waste/trash spread in three communities (Gouveia will be completed in Q3 2019 because the drone broke due to the strong wind gust during the survey in Porto Mosquito). The maps were included in the reports. As a result of the surveys, the decision has been made to install glass recycling machine in Rincão because the results showed the prevalence of glass in that community as compared to the three others where macro plastic waste was more dominant. In addition, sand extraction in the coastal zone continues to prevail in that village. The sand produced by recycling glass can be sold to construction companies. This decision was also supported by the President of the Municipality of Santa Catarina.

**A1.2 Will start in Q3 Y1**

**A 1.3 Ahead of schedule.** May-September. With an invitation from various institutions we already started awareness campaign focused on the marine and coastal pollution with the focus on plastics: in August we ran activities within the community group in Alto Gloria and the National Museum of the Archeology; in September with an invitation from the EU Delegation in Cabo Verde we participated in the beach cleaning campaign in Quebra-Canela (in the capital Praia). We prepared the blog for the Darwin Initiative newsletter introducing our activities linked to waste management. Regular posts on the topic are communicated on the partner ECOCV facebook page and website, and the Raiz Azul (@raizazulcabo Verde) Facebook page - which was specifically created for the project funded by Drawin Initiative (DI).

5 July. With an invitation by the scouts of São Francisco project site, on the Independence Day of Cabo Verde, we participated in the São Francisco beach clean-up campaign.

May-August. All the domestic waste collected in the 4 project sites, during the research surveys, was bagged and delivered to the municipal waste collection sites; in total, almost 1000 kg of domestic trash was removed from project sites just by conducting research.

**A1.4 July.** We (project team and the representatives of the Civil movement for climate change 350 Cabo Verde) had a meeting with the manager of Cavibel company ([www.eccbc.com](http://www.eccbc.com)) representative of Coca Cola in West Africa and Cabo Verde. They expressed interest in collaboration and development off joint actions to reduce plastic waste. Second meeting is scheduled in October 2019 to formalize the verbal agreement. Meeting with the Tecnical - national company producing various products with plastic packaging is planned in Q3. In addition, the potential buyer of the sand from the recycled bottles was identified in the capital Praia.

**A 1.5 May.** The meeting with the general administrator of CERMI (*Centro de Energias Renováveis e Manutenção Industrial* – Center of Renewable Energy and Industrial Maintenance) was held to discuss collaboration. The company agreed to support the adjustment of the recycling machine for more energy efficiency and training of community members to run the machine which is planned to be purchased in October 2019.

**A1.6 May-July.** The soil/sand samples from 4 target communities were collected to test for the prevalence of the micro plastics. Test have been conducted at the UniCV lab and the first technical report has been produced. Interestingly, São Francisco project site showed up to 10 time more plastic micro-fragments as compared to sampling stations in other 3 target villages. The samples of water/fish/invertebrates will be tested in Q3-4

**A 1.7 Ahead of schedule.** In June, project partner Poupart Design (community plastic recycling project) and ECOCV participated in the annual Environmental Fair organized by the Municipality of Praia. The recycled products made from plastic bags collected on the beach of the project site Porto Mosquito were presented for sale and awareness raising.

## **Output 2**

**2.1** Two meetings were held with INDP- National Institute for Fisheries Development (now renamed as the IMAR- *Instituto do Mar* - Institute of the Sea). First in the headquarters in Mindelo with the Director of the organization; second in Praia with the managing Director of the south islands. Some of the data has been received with the information on artisanal fisheries in Gouveia, Rincão and Porto Mosquito villages. Focal point for the institution has been appointed to support the implementation of project activities. Dr. Ronan Roche (Bangor University) produced the list of potential indicators (biological, socio-economic). This information was presented at the national workshop to assess the gaps in marine and coastal zones, in Sal island in May 2019. In September, Dr. Ronan Roche joined the project team in Cabo Verde. At UNICV we (project team and the main partners) held the workshop specifically focused in the development indicators. Part of the indicators were incorporated into the socio-ecological questionnaires to assess the viability and challenges of artisanal fisheries (fishers and fish sellers (mainly women) in target fishing villages. Survey has started in September in the villages of Rincão and Porto Mosquito and will be continued in Q3 and Q4. The decision has been made to select one of the coastal villages on the west side of Santiago Island as the control site (no project intervention but similar socio-environmental challenges) to compare the data. Biological indicators will be tested and finalized in Q3-Q4.

April-September. Number of UniCV students and local fishers have been trained in participatory marine biodiversity monitoring with the focus on marine megafauna (whale and dolphin surveys and marine birds); surveys have been conducted on the south east and south west/west side of the Santiago Island to cover the marine part of the project sites. In addition, many students lack basic snorkelling/ diving skills. Training has started in the local bay in capital Praia to strengthen swimming and snorkelling techniques; currently we are in the phase of introducing species data collection while snorkeling. Such an improved capacity, students will use to teach local community members during the implementation of training modules in Q3-Q4.

## **2.2 Start in Y2**

**2.3 Ahead of schedule.** April-September: taking invitations and opportunities from various institutions the project team and partners participated in awareness raising events at the Portuguese school in Praia, National Museum of Archaeology, local community gathering in Alto Gloria; beach clean up event at Quebra Canela (organised by the EU delegation in Cabo Verde); private school EII-CV; celebration of the international children's day in Porto Mosquito (organized by the target Municipality of Ribeira Grande de Santiago. All the activities included introduction to the global and national marine and coastal biodiversity; threats and potential solutions.

June-July, with an invitation of NGO ADAD (*Associação para a Defesa do Ambiente e Desenvolvimento*, Association for Environmental Protection and Development.), as part of the project to reduce impact of coastal development, and funded by PRCM (Regional Partnership for Coastal and Marine Conservation), Wetlands International Africa, MAVA Foundation, we delivered presentations at the University Jean Piaget in Praia and DNA Delegation in Tarrafal about the problems of coastal constructions/development on marine megafauna and coastal communities.

June. With an invitation from the Ministry of Maritime Economy, in partnership with Civil movement 350 Cabo Verde, Poupard Design, we also participated in the celebration of the Ocean Day - the march for the Ocean, artisanal Fair in Quebra-Canela and the lecture to the participants of the march on the marine biodiversity in Cabo Verde.

June. The official site on Facebook - Raiz Azul, was launched to communicate the DI funded project, progress of our work and raise awareness in various socio-environmental challenges and achievements nationally and internationally.

## **2.4 Start in Y2**

**2.5 September.** During the project workshop at the UniCV, the potential options to test different fishing techniques were discussed. Hand-line is the most common used technique by local fishers, followed by nets that are mainly used to fish for bait. In Q2 sea conditions were not favourable for the sea tests due to the prevailing southern swell. The field tests with local fishers are planned in Q3 in Rincão and Porto Mosquito villages. Fishers that are willing to participate in the trial tests have been identified.

**2.6 Ahead of schedule.** April-September during the trial eco-tours with the local artisanal fishers, the concept of collecting data on marine megafauna is already being introduced to both- local fishers and travelers joining the activity. In September, the UNICV macro algae specialist ran the assessment to identify algae species in the project zone of Gouveia - Porto Mosquito. One of the potential objectives is local algae cultivation to support the local livelihoods with the focus on women.

## **Output 3**

**3.1 May.** At the national meeting BIOTUR project to assess the gaps in the marine and coastal sector and identify new MPAs, the project team presented the theoretical overview of Baía do Inferno and the concept as the first proposed MPA on Santiago Island. This included published data on the area, biodiversity, geology, socio-ecological challenges, potential objectives and the potential zonation of the MPA. Some of the socio-biological indicators were prepared by Dr. Ronan Roche (Bangor University) for the monitoring of the area. The process of the presentation of the proposal for the establishment of the MPA was discussed with the representatives of the National Directorate of Environment (project partner and the institutions responsible for the management of all PAs in the country)

The underwater research expedition of Baía do Inferno was planned for August 2019, but due to the high southern swell and unfavorable sea conditions in the Bay, the decision was made to postpone surveys to October.

May-September. Four marine megafauna surveys were conducted in the project site, including Baía do Inferno. Two species of cetaceans have been confirmed: pantropical spotted dolphins and meloh-headed whales- species prone to standings. Two species of nesting marine birds: red billed tropicbird and brown boogie were confirmed in the Bay. In addition, the spots for the upcoming research expedition were explored during snorkeling surveys in the Bay, and potential 4 locations have been identified on the north and south sides of the Bay.

September. The coastal trip was conducted to identify the walking route from Porto Mosquito to the Baía do Inferno, culminating on the Mount Angra (564m). Along the way the location of the old volcano crater was identified and the potential route scoped. In Q3, the UNICV geologist will explore the geological history of the bay and the crater. The report with an Introduction to the geology of the island has already been prepared.

September. The joint project agreement was signed with the University Jean Piaget (Cabo Verde) and project partner ECOCV, for the installation of the signalization system in Baía do Inferno zone; this includes communication panels with the information on the biodiversity, history and geology of the area. The project is funded by the French Embassy in Cabo Verde.

**3.2 Ahead of schedule.** May-July. During the community meetings in the two project villages adjacent to the potential MPA (Porto Mosquito and Rincão) as well as during the follow up visits and joint activities, the concept of the MPA was introduced as the first step for the upcoming community consultations in Q4.

**3.3 Ahead of schedule.** September The meeting was held with the Director of the National Directorate of Environment to discuss the process of the preparation and the presentation of the proposal to the government. On behalf of his institution the Director expressed full support during the process.

**3.4 Ahead of schedule.** May-September. Meetings were held with the target Municipalities of Ribeira Grande de Santiago and Santa Catarina, IMAR (*Instituto do Mar* - Sea Institute) and DGRM (*Direção Geral dos Recursos Marinhos*, General Directorate of Marine Resources. The MPA concept was presented and the support for the establishment of the MPA was welcomed.

**3.5 Ahead of schedule.** In September, partner ECOCV participated in the international expedition for cetacean research in Cabo Verde, lead by the Irish and Dolphin Group and funded by the Island Foundation. The survey transects run through the DI project site, including Baía do Inferno. And this potential MPA was communicated internationally via partner social media sites. One of the outputs of the expedition will be the documentary, planned for release in 2020 where Baía do Inferno, the DI project and DI will be mentioned. In addition, most of the activities in Baía do Inferno are communicated with notion of the place of the potential first MPA on Santiago island.

## **Output 4**

**4.1 June-August.** Community meetings were conducted in all four project villages: São Francisco, Gouveia, Rincão and Porto Mosquito. The meetings were specifically designed to gather socio-ecological and cultural, historic data, local accommodation, food, celebrations, community organizations and active groups in the area as well as to map existing gaps, opportunities needs and challenges. Based on the mapping during the meetings and practical exploration of each site the dossier was prepared for each community. The format for the dossier was adjusted from the database format suggested by our Italian partner ViaggieMiraggi. The local services were summarised to start building vision for the inter-municipal ecotourism network. The key discovery was made: each community is very different socially, and on the level of environmental awareness and vision for the future. Therefore, the approach and targets are different too. The diversity of each location will make the final structure of the eco-network very unique and highly exploratory for the prospective travelers. However, some villages like Rincão and São Francisco are already more advanced for the integration in the network, while Gouveia and Porto Mosquito require more social unity and prospect of the future, as well as communal leadership especially in Porto Mosquito. The vision and concrete plan for each target village will be completed after

the consultation with the Association of the Travel Agencies of Santiago, local tour guides and other stakeholders within tourism sector in Q3.

**4.2 June.** Meetings were organised with the representatives of the Tourism Association of Santiago and the vice president of the Association of Travel Agencies of Cabo Verde. The project was presented, and verbal agreement was reached for potential collaboration in Q3-Q4 Y1 when the structure of the network and the vision of each community becomes more clear.

**4.3** Big part of the eco-network attributes were collected during community consultation meetings as described in 4.1. May- September, potential trails in the four project target areas we explored. At this stage one trail per community was identified. Trails were mapped and assessed by the level of difficulty, needed adjustments. Distinctive/ features of interest were marked (landscape, biological, cultural, historic). The report is prepared with the baseline presentation of the trails in each project community.

April-August. Two marine eco-tours were conducted with the eco-travelers from Italy in partnership with travel agency ViaggieMiraggi. The focus was the near coast boat trip to Baía do Inferno with local artisanal fishers from Porto Mosquito. Guests were introduced to the Bay, and the potential goal as an MPA; main marine megafauna and fish species; landscape and seascape of the Bay. After the trip questionnaire based survey was conducted to collect baseline on the level of satisfaction, memorable features, quality of services, willingness to pay for this kind of eco-excursion. After the boat trip, travelers stopped in the local fisher house for the traditional lunch.

**4.4 Ahead of schedule.** June-September. While conducting community meetings and mapping local services, locations/ establishments were scoped for the potential eco-centre. The preliminary decision has been made to set up at least 3 (possibly 4) small eco-hubs in each project village since each community very distinctive and has specific features. In addition, there is an urgent need to boost socio-environmental awareness on the larger scale, and having 3-4 of such eco-hubs will allow to maintain the momentum generated during the project.

August. Meeting was held with the manager of the project Xalabas (urban culture and arts, funded by the EU). Potential collaboration was discussed for the collaborative design of one of the eco-centres and support for future marketing of Raiz Azul eco-network.

**4.5 Ahead of schedule.** During community meetings gaps were assessed and enquiries made on the potential training needs. The full program will be finalised in Q3 but the priority modules have already been identified: health and safety at sea (in collaboration with Red Cross and professional divers); english language for beginners; reception of tourists/ eco-guiding; marine biodiversity and habitats/ landscape/ seascape (monitoring and presentation to tourists).

**4.6 Ahead of schedule.** May-June. The idea was born to create/ identify a name for the project and potential brand for the new eco-network on Santiago island that will be used in the post-project phase. Raiz Azul- the Blue Root (as translated from Caboverdean language) was chosen by the project team and partners as the most representative of our goals, ideas and the culture of Cabo Verde and the Ocean. In Q3 we aim to officially register the logo and the name of Raiz Azul as the new brand name.

**4.7 Ahead of schedule.** The meeting was held with the former director of the National Directorate of Tourism, currently working as the private consultant. The discussion has started to develop a responsible tourism module for local community members (adults and children) and for tourists that will be using the new eco-network destinations.

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**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.**

No such problems have been identified. All activities are on track as planned, even though the active implementation has started later than planned due to the delayed procedures of officially signing funding agreement and transfer of funds.

The only activity that had to be rescheduled was underwater research expedition in Baía do Inferno. The reason being unfavorable sea conditions due to the approaching rainy season. The expedition is planned for October 2019.

There were changes in project staff at UNICV. In Q1, the decision was reached to involved the expert in sociology Prof. Adilson Semedo, In Q2 the specialists in geology and expert in macroalgae join the project team to reinforce and strengthen the implementation of activities.

Project partner ECOCV has to substitute one personnel who left the country with another one.

The above mentioned changes did not affect the delivery of project activities nor the budget.

One of the key lessons learnt was the diversity and difference in social environment of each target project community. This requires flexibility and adjustments in developing activities and work methodologies by the project team. Having a multidisciplinary team and wide range of local partners significantly aids the process.

**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:	No
Formal change request submitted:	No

Received confirmation of change acceptance      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.

**4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?**

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. Additionally, if you were funded under R25 and asked to provide further information by your first half year report, please attach your response as a separate 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 DO NOT send these in the same email.**

Please send your **completed report by email** to [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: 25-035 Darwin Half Year Report**