Darwin Initiative Capability & Capacity: Final Report

To be completed with reference to the "Project Reporting Information Note": (https://www.darwininitiative.org.uk/resources/information-notes/).

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

Submission Deadline: no later than 3 months after agreed end date.

Submit to: BCF-Reports@niras.com including your project ref in the subject line.

Darwin Initiative Project Information

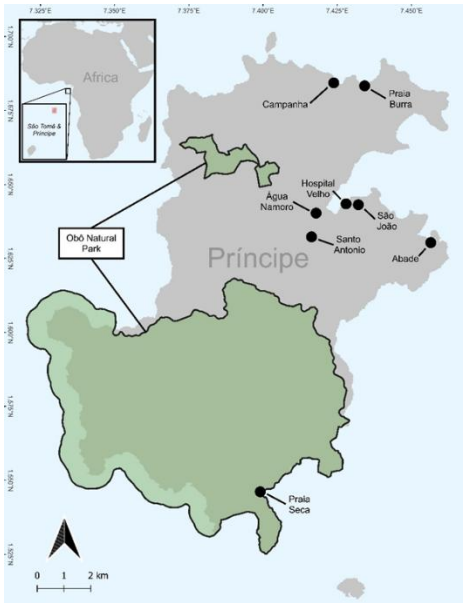
Project reference	DARCC023
Project title	Bolstering Príncipe's resilience to marine plastics through strengthened community capacity
Country(ies)	São Tomé and Príncipe
Lead Organisation	Fundação Príncipe
Project partner(s)	-
Darwin Initiative grant value	£197,900.00
Start/end dates of project	Apr 2023/ Mar 2025
Project Leader's name	Litoney Oliveira
Project website/blog/social media	Website: https://fundacaoprincipe.org/en/homepage Instagram: @fundacaoprincipe
Report author(s) and date	Emily Duncan, Litoney Oliveira 31st July 2025

1 Project Summary

This project aims to build community capacity to monitor marine plastic in the coastal and marine habitats of Príncipe Island and introduce alternative revenue opportunities to tackle existing plastic waste on the island. In doing this the project will seek to allay the negative socio-economic impacts on the island's small-scale fisheries, safeguarding food security and helping women and young mothers to explore diversified incomes, as well as contributing to Fundação Príncipe's long-standing work with the success of Marine Protected Areas (MPAs) and sea turtle conservation through diminishing the threats posed by the presence of plastic pollution

.

Príncipe Island is a small autonomous region within the country of São Tomé and Príncipe, situated in the Gulf of Guinea, approximately 200 km off the western coast of Gabon (please see map attached). A largely agrarian-based economy sees much of its population reliant on subsistence farming, fisheries, and forest products for their livelihood. Approximately 58.5% of the country's population lives below poverty line, with women being disproportionately affected, having lesser access to education and jobs than men. In 2012, Príncipe was designated as a World Biosphere Reserve by UNESCO, in recognition of its high degree of endemism of terrestrial fauna and flora, and its unique culture and communities. It also boasts great marine biodiversity, including threatened billfish, sharks and rays, five of the world's seven species of sea turtles (hawksbill, green, leatherback, loggerhead and olive ridley), seabirds, and cetaceans. Since 2010, the regional government has made efforts to protect the marine



environment, in particular sea turtles, by passing a regional law prohibiting the hunting and consumption of turtles. However, the government lacks the resources and capacity to effectively ensure enforcement; Fundacão Príncipe's (FP) marine conservation programme has supported these efforts by addressing threats to sea turtles such as illegal hunting, nest predation and coastal erosion due to illegal sand extraction. Recently, FP and Fauna & Flora International (FFI) led the creation of the country's first network of marine protected areas.

Through its ongoing work on the island, FP has been privy to the increasing threat of marine plastic pollution and its effect on marine biodiversity – turtles have increasingly been found with ingested plastics within their systems each season, and video-tagged turtles have revealed plastic in the formerly pristine waters around the island. Additionally, this plastic has the potential to affect the productivity, viability, profitability, and safety of the island's small-scale fisheries, through impacts caused by marine litter and plastics caught in nets, damage to boats and fishing gear, physical entanglement, as well as the degradation and eventual destruction of marine habitats and a decrease in fisheries' resources as a result of entanglement or ingestion by various marine species. Combined with other factors such as climate change, this potentially positions the island's fisheries at a very vulnerable state.

There is now an immediate need to strengthen regional and national capacity for effective marine biodiversity conservation, while safeguarding prevalent fishing traditions and establishing sustainable alternatives to tackle a steadily growing and pervasive anthropogenic problem. Regional authorities are in favour of approaches to engage communities in participatory marine monitoring and prioritising the identification and piloting of economic incentive-based interventions that demonstrate viable livelihood benefits to the local population through conservation. The identification of these problems and priority action areas has taken place through in-depth discussions with fishers and other community members on Príncipe Island as well as government agencies, led by FP's São Tomé and expatriate personnel based on the island.

2 Project Partnerships

The project has been particularly strongly focused on developing stronger collaboration between the different people/ groups. Through public training, the project has brought together people such as the Fisheries minister, the technical specialist (ED), and different FP staff members to build capacity. For example, FP team and the wider community benefited from learning techniques and awareness. FP staff member Belzamiel Umbelina furthered numerous skills particularly in continual monitoring practices, data management and conducting socio-economic surveys. Numerous technical specialists from organisations such as University of Exeter, Zoological Society of London, Flora and Fauna, Universidade de Lisboa and NOVA University Lisobon have come together FP staff members have been involved in the Abandoned, Lost or Discarded Fishing Gear (ALDFG) survey data analysis and scientific publication draft creation. Both Belzamiel Umbelina and Jormicilesa Dias attended and presented at their first international conference (International Sea Turtle Symposium, Ghana 2025), which allowed them to network with worldwide sea turtle conservationists and build links with other African organisations in particular. Other important partners attended the final project presentation including the Secretary of the Biosphere Reserve, local ministers and major tourist business representatives such as HBD (Annex 5; Section 3.1). The project's technical specialist (ED) was involved in project planning, MEL and writing the Final Report and will maintain a relationship after project completion.

3 Project Achievements

3.1 Outputs

Output 1: Local stakeholders (FP, government, coastguard, communities) have increased capacity and capability to monitor plastic pollution at beaches, in-water and river mouths and knowledge of marine plastic pollution distribution across Príncipe.

Training and capacity workshops for local stakeholders and more members of the FP team have been conducted on the established beach monitoring methodology, utilising transects and quadrat sampling alongside classification by the international OSPAR protocol) during FP's previous project with the Whitley Conservation Awards, 11 beach sites receive monthly monitoring (**activity 1.1;** 26 people; 17 men and 9 women in Year 1; 53 people; 28 men and 25 women in Year 2; **Indicator 1.1 & DI-A01**). In addition, FP team members Estrela Matilde and Belzamiel Umbelina alongside technical consultant Dr. Emily Duncan were involved in the successful publication of beach plastic pollution data entitled "Plastic pollution on remote islands: A baseline study of Príncipe, Gulf of Guinea" published in Marine Environmental Research in September 2023. During technical consultant visit to the island in August-September 2023 training and capacity building activities were conducted for the core FP team and FP marine guard's teams on in-water sampling (**activity 1.2;** Annex 5 Fig S1.1). This involved active participation into developing the methodology and trialling the plastic trawl equipment (26 people; 17 men and 9 women in Year 1; 53 people; 28 men and 25 women in Year 2; **Indicator 1.1 & DI-A01;** **Fig 1.**).

Fig 1 September 2023: Practical training and capacity building of government officials – Fisheries Director and member of the Forest Department. Both participating in learning beach and in-water methodologies.

A net constructed on the island using old mosquito netting material has provided a low-cost alternative to traditional plankton sampling, bypassing import and boat capacity issues. Replicates can also to constructed in the future for potential expansion of sampling and could provide a low-cost sampling solutions for other areas within the region. The in-water methodology was established; 10 minute trawls with a specific datasheet has now been created for the use by the FP team. FP team members also received capacity building and training in database management and construction with the collaborative creation of a summary database for data collected using the in-water sampling methodology (**activity 1.6;** Annex 5 Fig S1.2). Following this consultation conservations with technical consultant and the FP team decided on 6 in-water/river mouth sites (1x1km squared) were identified and decided upon from a previous participatory map from fisher interviews about sightings of marine turtle foraging and resting activities (**activity 1.4;** Annex 5 Fig S1.2). These are equally spread in different coastal directions, river mouth sites and also important marine turtle nesting beaches. Although (as

specified originally in Indicator 0.2 and 1.2) 10 of in-water and river mouth were reduced to a total of 6 in-water/ river mouth sites (Change request approved) for consistency and to reduce the fatigue around monitoring activities (Section 3.2). In-water monitoring has been implemented monthly in selected sites around the island of Príncipe since October 2023 (**activity 1.5; Indicator 1.2;** Annex 5 Fig S1.1). The FP team and other stakeholders (including members of the 'Plastic Re-use Hub') received training workshops and laboratory guide materials on standardised plastic pollution categorisation in Jan 2024 (22 people; 13 women, 9 men) (**activity 1.3; Indicator 1.1 & DI-C16;** Annex 5 Fig S1.4, S1.5). This increases the capacity of the FP to contribute to globally data on plastic pollution with the addition of internationally recognised classification for in-water and ingested plastic pieces with the established OSPAR beach protocol. Implementation of monthly beach and in-water monitoring surveys have continued to occur over selected sites for both methodologies. A centralised database has been constructed with assistance of technical consultant (**activity 1.6;** Annex 5 Fig S1.6). The beach monitoring database now consists of records of 13,312 debris items including 75% of this being plastic (10,181 plastic items). Further analysis has shown the beaches that have the highest average plastic items found, including some of the islands most important sea turtle nesting beaches. The most common found items bottle caps, plastic bottles and plastic bag pieces. As for in-water samples the majority of these were classified (utilising the MSFD methods learnt by the FP team; **activity 1.3 & DI-C16;** Annex 5 Fig S1.4, S1.5) as 'SHE' plastics for example food packaging. The creation of this these databases will provide opportunities to explore the data further to aid in report writing for dissemination as well as for potential scientific publications or presentations. The FP staff have been supported by the technical consultant to develop data management, analysis and scientific presentation skills for example analysis skills in Excel (**activity 1.6;** Annex 5 Fig S1.7). Furthermore, Belzamiel Umbelina presented to regional and international stakeholder on the beach monitoring protocols poster presentation at the International Sea Turtle Symposium (Ghana, March 2025; **activity 1.7;** Annex 5 Fig S1.8, S1.9). Results were also presented to local authorities and other stakeholders (Mar 2025; 11 attendees; **activity 1.7;** Annex 5 Fig S1.10).

Output 2: There is a centralised reporting mechanism for local stakeholders to record ingestion/entanglement events and marine turtle interactions in Príncipe

The FP team liased with the technical consultant for material in which to learn about the current knowledge of the impact of plastic pollution on marine turtles. A public presentation was conducted (14/09/2023; 26 attendees) where FP staff Belzamiel Umbelina and Jormicilesa Dias presented about plastic pollution and marine turtles for theoretical training for the wider FP team and local stakeholders (**activity 2.1**). Due to a lack of stranded marine turtle occurrences since the project commenced in April 2023 a physical training workshop on necropsy methodology and sample analysis for plastic ingestion therefore a theoretical marine turtle stranding sampling protocol workshop was conducted by the technical consultant for the FP team and local stakeholder using fish gastrointestinal tracts (GI) with guidance materials in Portuguese (**activity 2.2; Indicator 2.1;** Annex 5 Fig S2.1,S2.2). Participants got to understand the concept of separating the different section of the GI as well as the methods to filter and search its content for ingested plastic, which can then be practising should a stranded marine turtle occur on the island. A survey was developed, with the technical consultant, to collect data on Abandoned, lost or otherwise discarded fishing gear (ALDFG) and marine fauna entanglement incidences around the Príncipe. This was developed collaboratively, piloted by the FP team and received ethical approval from the University of Exeter Ethics Board. The survey included questions relating to the use and management of different types of nets, the behaviour of discarding fishing nets, incidences of marine megafauna entanglement, and potential solutions for better management of old nets (**activity 2.3**; Annex 5 Fig S2.3). Some questions were based on the 'Theory of Planned Behaviour' to aid in the understanding behind the drivers of behaviour and provide ideas for solutions. Further to this, Transform Infrared Spectroscopy (FTIR) was used to analysis of collected net samples to verify their material composition, as reported by participants. A total of 51 participants completed the survey in April 2024, representing 53% of net fishers in Príncipe (**Indicator 2.2 & DI-B05**). The technical consultant supported FP team in the capability of utilising surveying technological platforms (Kobo Toolbox) in addition to conducting analysis and drafting a scientific data publication draft (**activity 2.4;** Annex 5 Fig S2.4). This work was presented to regional and international

stakeholders as an oral presentation at the International Sea Turtle Symposium (Ghana, March 2025) by technical consultant Dr. Emily Duncan (**activity 2.5 ;** Annex 5 Fig S2.5, S2.6). Additionally, these results were also presented to local authorities and other stakeholders (Mar 2025; 11 attendees; **activity 2.5;** Annex 5 Fig S1.10).

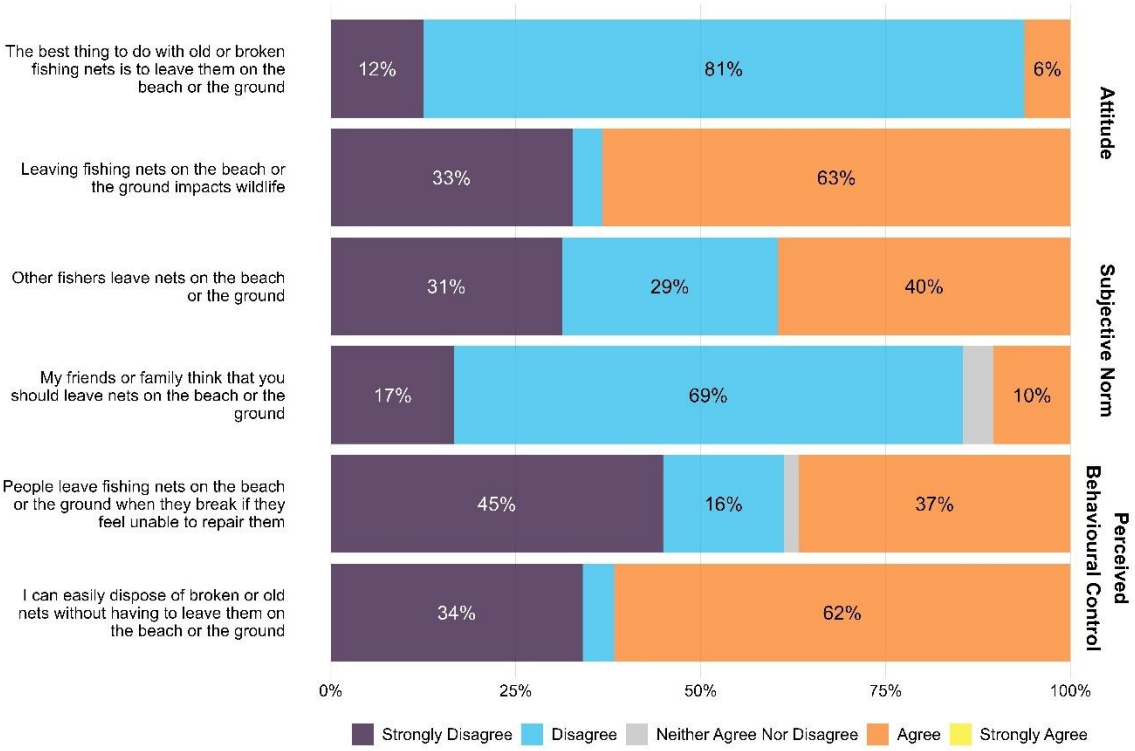


Fig 2 Proportion of responses (%) to each statement according to the respective coloured scale. Statements were grounded in the Theory of Planned behaviour to capture attitudes, social norms and perceived behavioural control relating to the behaviour of interest; net fishers leaving (discarding) nets on the beach or ground. n per statement = 47-49 respondents.

Key findings: Results from this survey provided numerous insights that will be valuable to future projects to address ALDFG on Príncipe. All but one participant reported owning surface gillnets, repairing them before replacing them (88%), and typically disposing them by using the material for other purposes such as for creating fences, or for washing dishes (84%). Collected samples of discarded nets were exclusively made of synthetic materials, despite most participants reporting their nets being made of cotton. Net fishers reported bycatch and entanglement sightings of a wide range of marine megafauna including turtles, dolphins, rays, sharks and seabirds. Turtles were most often sighted alive and were released (91%), owing to an island-wide awareness programme. In comparison, other taxa such as sharks were mostly bycaught in active nets and taken for consumption (74%) or sold (25%). The main reported reasons that participants discarded nets were; whether they felt able to repair the nets, the ease of disposal of old nets without having to discard them in communities, attitudes towards the impact of discarded nets on marine fauna and is other leaves also discarded nets therefore being a social norm. The main proposed initiatives to stop nets being discarded into the environment were education on the impacts of discarding nets (52%) and improved waste management infrastructure (44%). Two participants also suggested a circular economy net collection project. Most respondents (90%) agreed that a net collection scheme would be a good idea, with a few suggesting a need to be financially imbursed for net collection (**activity 2.4;** **Fig. 2**)

Output 3: The local communities are empowered to monitor, and have increased awareness of, the issue of plastic pollution via the deployment of citizen science tools and knowledge exchange presentations

A unique 'list' on the citizen science app for plastic pollution Marine Debris Tracker (MDT) was set-up for Fundação Príncipe specifically. The FP team worked with the technical consultant to translate a list of litter items into local names and add new items to the existing MDT list that were identified from previous beach plastic pollution studies for Príncipe Island (Ramilo-Henry et al 2023). Technical training was conducted on how to use the app with FP staff (Annex 5 Fig S3.1). Subsequently, the FP team launched a campaign in each community (Abade, Burra, Campanha, Hospital Velho & Santo António praia) called "Jovens pelo planeta" in the for young people in local community focal groups to invite them to take part in being a citizen science monitor of the beaches within their community using the application (**activity 3.1, DI-A02**). Five 'Jovens pelo planeta' were chosen and trained by FP staff on the guideline, the MDT app and monitoring methodology (**Indicator 3.1 & 3.2**). However, recent updates to the MDT application (Jan 2024) meant it no longer works on the operating system of the phones that were purchased for the 'Jovens pelo planeta'. The FP team overcame these issues by printing the unique MDT list on the paper and then manually uploading this onto the MDT website database (Annex 5 Fig S3.2).

Fig 3 A selection of photographs taken from the Captain Fanplastic initiative: school-children conducting a beach clean, Jormicilesa conducting educational awareness activities, school-children at a session, a young girl holds up one of the 200 educational books distributed in collaboration with Captain Fanplastic.

Outreach events were conducted via the Captain Fanplastic framework with school children (2000 primary and 700 secondary aged children across the island). This educational organisation has created a book and teaching materials to raise environmental literacy and foster behavioural change amongst youth groups, this involved; school programmes, storytelling and clean-up events (**Indicator 3.2, DI-A04;** Fig 3). Jormicilesa Dias presented to regional and international stakeholder on the beach monitoring protocols poster presentation at the International Sea Turtle Symposium (Ghana, March 2025; **activity 3.6;** Annex 5 Fig S3.3, S3.4).The Fisheries Director was taken out on in-water sampling activity (**activity 3.3;** Fig 1), as well as the Coast Guard team, to understand the methodology. Standard data to collect during entanglement events were given to tour operators from the major hotels on the island (**Indicator 3.2**). Dissemination presentations to fishers were initially delayed due to the importance of not influencing or changing knowledge, opinions or perceptions of discarded fishing gear or entanglement events within the questionnaire data. Monthly meetings were difficult to establish due to engagement fatigue within the communities and staffing resource

constraints at FP, however knowledge exchange presentations and practical sessions providing training on monitoring methodologies were completed in 5 communities over 3 intensive periods in Year 2; 53 people (28 men, 25 women) (**activity 3.4;** Annex 5 Fig S3.5). Reports were produced to record information and questions posed by fishers during discussions about plastic pollution with FP staff which was used in final project presentation to 11 important stakeholders in March 2025 (**activity 3.5;** Annex 5 Fig S1.10)

Output 4: Young women and mothers at risk have established enterprises supported by the "Plastic Re-use Hub" which generate alternative income streams and improve local livelihoods

At the beginning of the project a total of 3 meetings were held with 5 women, which are now the main team that will manage the Plastic Re-use Hub (**activity 4.1; Indicator 4.1;** Annex 5 Fig S4.1). This initial group of 5 women managed the functional running of the hub and contacting further members, especially targeting young mothers and women who are unemployed. The group voted on Anilta as the person which will the leader of the group. Anilta is a seamstress who won a previously run FP competition, with the development of a reusable nappies. In further, meetings the group decided on the layout of the new designated space. In Year there were a total of 5 women working full-time at the Plastic Re-use Hub. Most of the equipment and materials have now arrived on the island. During the series of meetings, the group was also introduced to Adnei Tavares, who is a consulting specialist on finance training. Adnei will support the group and their business developments by assessing their needs and skill levels which in turn aided in proposing a budget for training. The machinery and equipment arrived on the island November 2023 and the group received substantial training on using the machines. During this time targeted beach and community litter collection were established for plastic waste to supply material for the "Plastic Reuse Hub products" (**activity 4.2; Indicator 4.1;** Annex 5 Fig S4.1). Alongside the group also had training on business management. Some members of the group were already involved in the business management training done during with Whitley Awards project, with the 5 plastic business ideas already piloted by FP. The initial group of 5 women then invited a further 7 women to receive the training on the machinery and equipment to make waste-based products (**activity 4.3;** Annex 5 Fig S4.1).

Fig 4 Visitors looking at the products developed by the 'Plastic Re-Use Hub', during the Environmental Education Fair organised by FP on 6th June 2024.

Further targeted beach litter collection campaigns have continued for plastic waste collection to be used in the creation of re-use products, with a total of 98.6kg of plastic collected to be used to make products (**activity 4.2;** Annex 5 Fig S4.2). Since April 2024, a total of 187 items have been sold by the "Plastic Re-use Hub" for a total of 3,155 Stn (**DI-B04;** Annex 5 Fig S4.3). The "Plastic Re-use Hub" continues to develop as a waste-based sustainable enterprise (**activity 4.6**), a shop space continues to be developed in a central location in Santo Antonio to sale products, there is also plans for discussions with major hotels to stock products to sell to visitors to the island. Furthermore the members of the "Plastic Re-use Hub" took part in island-

wide community events such as the Environmental Education Fair called the “Biosphere Fair” in June 2024 (**activity 4.3;** Fig 3). Many visitors to the fair stopped and commented at they were amazed by the products, which are new to the island and that they brough them hope for the reduction of plastic pollution. Unfortunately, after this event some of the vital machinery at the Plastic Re-use Hub” broke and a part needed to be sent and imported to Príncipe. Waiting for the part to be sent to the island caused unanticipated delays to the development of “Plastic Re-use Hub” and caused some members to leave to alternative employment. Once the parts were delivered and the machines fixed 6 women joined as members were trained on the use of machines, all these women are currently working part-time at the “Plastic Re-use Hub” (March 2025; Annex 5 Fig S4.4). It is hoped that the “Plastic Re-use Hub” work can be continued within future projects to development participatory business plans and provide a stable monthly income for the women who are members (**activity 4.6; Indicator 4.2, 4.3**).

3.2 Outcome

The impact of plastic pollution on the communities and biodiversity of Príncipe is mitigated through long-term monitoring, increased awareness and equitable and sustainable community-driven solutions

0.1 At least 6 FP staff members, 2 coast guard members and 1 regional government staff are trained in monitoring and standardised reporting in the first year of the project.

Achievements: During the project extensive training was provided in Príncipe to 101 (54 men, 47 women) individuals across numerous different sectors of the local partners, including FP staff members, coast guards and the Fisheries Director from the regional government. This has increased institutional and local capacity to collect data for monitoring and standardised reporting for plastic pollution that can be used to provide baseline data and inform decisions for solutions on the Príncipe. Over 75 hours of training was delivered on monitoring methodologies, turtle necropsy and plastic ingestion analysis across stakeholders (**Indicator 1.1 & 2.1**).

Evidence: Registration of attendance of individuals at public presentations and training workshops with photographic evidence. Reports from training events with stakeholders (Annex 5; Section 3.1).

Comments: This indicator remained valid during the project.

0.2 At least 10 beach, 10 in-water and 10 river mouth habitats receive monthly monitoring and standardised reporting of marine turtle impact events during the lifetime of the project.

Achievements: Throughout the first year of this project, it became apparent through increased knowledge of the number of sites and the time constraints on capacity for visiting in-water/ river mouth sites that for consistency and to reduce the fatigue around monitoring activities that a total of 6 in-water/ river mouth sites is the optimal number. However, 11 beach sites receive monthly monitoring (**Indicator 1.1**). Two comprehensive databases now exist having entries for over a year-long period (**Indicator 1.2 & DI-C16;** Annex 5; Section 3.1). The FP team and other partners were also trained in the protocols to investigate ingested plastic and entanglement events (**Indicator 2.1;** Annex 5).

Evidence: Database entry records, the register of attendance of individuals at public presentations and training workshops with photographic evidence (Annex 5; Section 3.1).

Comments: This indicator was adjusted and a change request approved.

0.3 At least four sustainable women and young mother-led alternative livelihoods businesses based on plastic re-use products are in place on the island, with a minimum of 20 women and young mothers increasing their monthly income by 20% until the end of the project.

Achievements: Good progress has been made towards alternative livelihoods businesses using plastic re-use products. In total 18 women and young mothers were trained on the machine to make the plastic re-use products. The ‘Plastic Re-use Hub’ now has a dedicated space for production and selling products. Members have also agreed for products to be displayed in the major hotels on the island to have access to selling to visiting tourists (**Indicator 4.1**).

Evidence: Reports on the activities 'Plastic Re-use Hub', production and sales records and training workshops with photographic evidence (Annex 5; Section 3.1).

Comments: Due to unforeseen machinery issues and delays of importing new parts meant that members needed to seek alternative employment in Autumn 2024 (**Assumption 4.**). FP team acted as soon as the machinery could be fixed and launched a new training campaign in February 2025 which means 6 women are working part-time at the "Plastic Re-use Hub", it hoped that work to develop participatory business plans providing a stable income increase can be continued in future projects (**Indicator 4.2, 4.3**).

0.4 At least 50% of the island's population (~4000 people) has increased awareness regarding plastic pollution by the end of the project.

Progress: The project is on a good trajectory to increase the awareness of plastic pollution to the island's population for examples via training of the FP staff and wider stakeholders, women at the 'Plastic Re-use Hub', children involved in 'Joven pelo Planeta' and members of the fisher communities. In total the project reached 2817 individuals plus those who attended island-wide events such as the 'Biosphere Fair'.

Evidence: The register of attendance of individuals at public presentations and training workshops with photographic evidence (Annex 5; Section 3.1).

Comments: Many outreach activities were planned to engage with to the wider community and in terms of children were successful with 2700 students being educated about plastic pollution. However, activities that aimed to engage with fisher communities were more challenging, although 51 fishers took part in the survey and a further 53 individuals in community workshops the establishment of regular events remained an issue for FP staff. Many members of these communities are experiencing research fatigue from similar activities in previous projects as FP have extensively engaged with fisher communities during MPA consultations etc. Although low participation from members of focal groups was identified during the initiation of the project (**Assumption 3.**) and the fact that FP trailed different activities other than presentations to raise awareness engagement for regular meetings remained low than expected.

3.3 Monitoring of assumptions

Assumption 1- Approach to training workshops will be effective in increasing knowledge and capability for monitoring by local stakeholders. **Comments:** The participatory and practical approach to the training alongside supporting laboratory guide materials (translated into Portuguese) was very successful for both workshops held (**activity 1.3 & 2.2**). All participants learnt about the theory supported by copies of the training materials and then all took that in practical exercises to embed the learning. Trained individuals from FP & technical consultant were present however stakeholders were encouraged to work independently in the practical tasks to demonstrate learning and then have the option to ask questions that arose.

Assumption 2 - Fieldwork logistics and constraints will allow monthly monitoring of multiple sites. **Comments:** Overall, despite logistical issues and constraints monthly monitoring of selected sites have continued as consistently as possible. Due to staffing issues and extreme weather some of the sites in the remote South of Príncipe could not be sampled in some months due to too higher risk in travelling by boat and a lack of trained staff at the beginning of the project (due to injury from accident). However, for the majority of sites have been successfully sampled monthly due to logistical organise to visit southern beaches and in between sample in-water sites therefore a lot of sampling achieved within one day.

Assumption 3 - There is participation from members of focal groups from community in citizen science tools. **Comments:** There has been successful participation from focal group with citizen science tools. The five 'Jovens pelo planeta' volunteered themselves to become part of the project via the MDT app citizen science initiative. These members of the focal group also have continued to participate within these citizen science tools despite the issues with the phone technology. Participation from the focal group of fishers proved more challenging, although many agreed to participate in surveys of ALDFG and entanglement incidences however regular engagement in citizen science tools was difficult for FP team to establish due to community fatigue stemming from continued participation in other projects e.g. MPAs.

Assumption 4 - There is participation from young women in the “Plastic Re-use Hub”. **Comments:** There has been very positive notable participation from young women in the ‘Plastic Re-use Hub’. The Hub now hosts 5 young women working full-time and a further 7 have received training on using the plastic re-use machinery. However, due to unforeseen machinery issues and delays of importing new parts members needed to seek alternative employment in Autumn 2024. FP staff launched a new training campaign in February 2025 training 6 women that are now working part-time at the “Plastic Re-use Hub”.

Assumption 5 - Targeted collection for plastic will generate enough material to be used in the creation of re-use products. **Comments:** Targeted collection for plastic has generating enough material during the project to be used in the creation of the re-use products. Collections include plastics within the communities where the women live, and beach collected items. The members of the Hub recieved training in which plastic polymers can be used on the machines e.g. HDPE which is a commonly found polymer in plastic waste and exist in a wide range of colours that can be used in the design of the re-use products.

Assumption 6 - Alternative income sources can be generated via selling of products from the “Plastic Re-use Hub”. **Comments:** This women-run Hub are on a positive trajectory towards generating alternative income sources. The ‘Plastic Re-use Hub’ now has a dedicated space for production but also a space for a shop. The members have also agreed for products to be displayed in the major hotels on the island to have access to selling to visiting tourists. The sale of products had occurred (Annex 5; Section 3.1), however unforeseen machinery issues and delays limited the consistency of income sources.

4 Contribution to Darwin Initiative Programme Objectives

4.1 Project support to the Conventions, Treaties or Agreements

The establishment of long-term standardised environmental sampling (**activity 1.5; Darwin Initiative Standard Indicator DI-C16**) will allow for data to monitor the successful implementation of the National Environmental Base Laws. For example, Law Nº10/1999, which includes protection of habitats, safeguarding biodiversity, and adequate waste management as fundamental objectives (Art. 16º); and the Plastic Bags Law (Law Nº8/2020), which acknowledges the urgency in addressing the impacts of plastic waste, and prohibits the production, import, commercialisation or distribution of non-biodegradable plastic bags. Building local capacity for plastic monitoring and transformation via the citizen science initiatives (**Output 3; DI-A01**) and the Plastic Reuse Hub (**Output 4; DI-B04**) will contribute towards the regional government’s Príncipe 2030 Plan. Completed and on-going activities are promoting sustainable recycling and selective waste collection practices as well education towards waste management and marine ecosystems protection via participation, and reinforce monitoring, enforcement, governance and control of local marine environment (Objectives 1.1, 1.a and 1.b) (Regional Decree Nº03/2020). Similarly, the project will align with the National Biodiversity Strategy and Action Plan 2015-2020 (NBSAP II) by focusing on the conservation of coastal and marine ecosystems. Increased capability to investigate and report events ingestion or entanglement impacting marine turtles (**Output 2; DI-B05**) through promoting awareness, conservation of marine areas and protection of sea turtles (Objectives 1.1 and 1.2). This alongside environmental monitoring (**Output 1; DI-A04**) this approach is expected to strengthen the institutional, legal and regulatory framework by promoting cross-sectorial partnerships for conservation, and mechanisms for the implementation or enforcement of already approved legislation (Objectives 5.1 and 5.2). Finally, the project aligns with international commitments under the Convention on Biological Diversity, as set forth in the NBSAP II, the Convention on the Conservation of Migratory Species of Wild Animals through monitoring impacts and understanding how to mitigate risks. The Sustainable Development Goals will also be contributed through capacity building and awareness raising, activities will contribute towards targets 12.8 and 14.a; alternative plastic waste-based livelihood initiatives will contribute towards poverty alleviation (SDG1), economic growth (SDG8), and reduction or reuse plastic pollution (SDGS 12 and 14); and the establishment of knowledge sharing international partnerships will contribute towards SDG17(**DI-A02**). Data from this project (**Output 1 & 2; DI-B05, DI-C16**) and lessons learnt from engaging with local communities (**Output 3 & 4; DI-A01, DI-A02, DI-A04, DI-B04, DI-B05**) will feed into information about the

needs of SIDs in the creation and final decisions for the International Plastics Treaty, set to be finalised by the end of 2024. This legally binding treaty aims to end plastic pollution by 2040. United Nations member countries will negotiate and set obligations on countries to reduce pollution across the lifecycle, reduce consumption, promote reuse and improve waste management systems for plastics.

4.2 Project support to biodiversity conservation and multidimensional poverty reduction

This project has been a crucial start for the island of Príncipe to begin to tackle the issue of plastic pollution. A continued influx of plastic could lead to ongoing and potentially irreversible declines in the ecological integrity of the island's marine habitat and species, as well as exacerbated negative socio-economic impacts on its small-scale fisheries. These, in turn, will propel both marine and human communities towards an increased vulnerability to climate change risks and habitat degradation. Through an entirely locally driven process this project is helping to make impact to both higher-level biodiversity conservation and poverty reduction goals.

Biodiversity conservation

Short-term: This project has developed community capacity collection of critical baseline data (**DI-A01**). The FP team now have skills to monitor and collate important data on plastic pollution in multiple critical marine habitats (**DI-C16**). The 'Jovens pelo Planeta' program has 5 youth trained and with increased awareness across a range of communities and school-based educational has now reached 2000 primary, 700 secondary aged children across the island (**DI-A04**). The survey of fishers about behaviours around discarded fishing gear and entanglement incidences collected their opinions and ideas on alternative methods to manage fishing waste as well as beginning conversations within the fishing communities around more sustainable practices that will benefit marine biodiversity and reduce entanglement event risk for marine turtles and other vulnerable species (**DI-B05; DI-A04**). Valuable insights were gleaned from this data analysis such as the main driving factors of discarding behaviours, current practices and potential solutions that could be implemented on Príncipe contributing to major knowledge gaps on ALDFG in artisanal fisheries, particularly in Small Island Developing States (SIDS).

Long-term: Methods of monitoring marine habitats for baseline data on plastic pollution could be subsequently scaled to São Tomé and other neighbouring regions or SIDs to provide a better regionally perspective of the threat to biodiversity from plastic pollution (**DI-C16**). Data can be utilised to strengthen regional and national legislation and feed into strategies/ mitigation measures to reduce plastic pollution generated regionally e.g. taxes on plastic packaging or legally prohibiting single-use plastics. Sustained community engagement and awareness building in different sectors e.g. children, fishers and young women will aid in participation contra-plastic endeavours on the island, helping to improve ecosystem health, reducing threats for species such as marine turtles and preserving marine biodiversity (**DI-B05; DI-A04**).

Poverty reduction

Short-term: Before the start of this project there were a lack of education and awareness initiatives around plastic pollution and begin conversations around sustainable waste management, re-use of plastic waste and the reduction in single-use plastics entering the island improving both health and wellbeing of the communities on the island. This project is also working on diversification of local livelihoods for vulnerable groups. Women and young mothers via 'Plastic Re-use Hub' have the opportunity to create alternative livelihoods and diversify their incomes with plastic re-use products as well as receiving training in business and financial management; 18 individuals that received training, firstly in business management, and secondly in the utilisation of machines (**DI-B04**). Understanding the behaviour around discarded fishing gear and work on solutions will aid in the reduction of ALDFG in marine habitats around Príncipe and incidental capture of fish therefore sustain food security for the inhabitants of the island (**DI-B05**)**.**

Long-term: The project has generated knowledge, ideas and opinions around circular economy or alternative waste disposal of fishing gear. It will then be possible to connect and expand ideas such as those in the Philippines implemented by Coast4C, this will allow for

diversification and additional income from a waste product that would otherwise be discarding into the environment. The questionnaire and knowledge dissemination carried out during this project could be replicated regionally to build a network around tackling the issue of ghost gear in the Gulf of Guinea, improving food security and potentially creating alternative livelihoods (**DI-B05**). The 'Plastic Re-use Hub' could grow into a long-lasting sustainable business for women and young mothers on the island, with continued business and financial training it's possible that this will snowball into the development of further businesses and aiding in diversifying incomes (**DI-A02**, **DI-B04**).The legacy of this project could reach ~8000 people.

4.3 Gender Equality and Social Inclusion (GESI)

Please quantify the proportion of women on the Project Board[1].	Ana Pimentel, Emily Duncan, Jormicilesa Dias
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women[2].	50% women in project leadership team

GESI Scale	Description	Put X where you think your project is on the scale
Not yet sensitive	The GESI context may have been considered but the project isn't quite meeting the requirements of a 'sensitive' approach	
Sensitive	The GESI context has been considered and project activities take this into account in their design and implementation. The project addresses basic needs and vulnerabilities of women and marginalised groups and the project will not contribute to or create further inequalities.	
Empowering	The project has all the characteristics of a 'sensitive' approach whilst also increasing equal access to assets, resources and capabilities for women and marginalised groups	X
Transformative	The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change	

The FP mission is to create economic and social development opportunities, and so this project aims to deliver a gender-integrated approach, ensuring equal access, participation and opportunities for both women and men throughout the project cycle. Prior to the start of the project and under guidance from Fauna & Flora (FF), FP developed its Gender Action Plan, which will be used to provide the guidelines and metrics to monitor and evaluate the social impact of implemented projects on the island's at-risk women as well as identifying barriers to participation. We endeavoured to integrate women and other marginalised groups such as youth within our different activities and levels of engagement with the communities on Príncipe Island. Furthermore we sought to support increased empowerment and leadership

[1] A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

[2] Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

opportunities in terms of access to employment, skills and knowledge. Gender disaggregated data was also collected to track impact related to activities.

Evidence of our efforts during the project for each output is detailed below:

Output 1: Increased capacity and capability to monitor plastic pollution – During the implementation of training workshops women from both the FP, Plastic Re-use Hub and other stakeholders were actively encouraged to attend to wider skills: practical training on beach and in-water methodologies for 101 individuals (54 men, 47 women) created increased equal access to skill development and knowledge acquisition.

Output 2: Centralised reporting mechanism of plastic pollution and marine turtle interactions – Although fishing is a traditionally male-dominated activity the FP team have been actively encouraging the participation of women to make sure their knowledge, opinion and perceptions can be recorded and analysed with the results of the questionnaire.

Output 3: Increased community awareness and empowerment –
Through MDT jovens pelo planeta, and the work done under the Captain Fanplastic project, FP is increasing community awareness and empowerment, with a special focus on young women.

Output 4: Generate alternative income streams and improve local livelihoods - Through the establishment of the Plastic Re-Use Hub, the project is specifically targeting young mothers and women at risk. The hub now has 6 women working part-time (and 12 others who has received training) building new business ideas for sustainable alternative livelihoods. Female entrepreneurs leading previous FP-supported initiatives will be encouraged to participate in community meetings and showcase their personal journeys towards empowerment. This approach will promote female role-models that inspire younger generations of island women to reach further, displacing widespread male-biased social norms and expectations.

4.4 Transfer of knowledge

This project had a key focus on seeking to transfer knowledge firstly from the technical consultant to key FP staff members which subsequently went onto train a diverse group of stakeholders (**DI-A01**). This trainer-to-trainer approach was supported by practical training sessions and the development of guidance materials and protocols were in digital and physical form, being translated from English into Portuguese (Annex 5 Fig S1.4, S1.7, S2.1). The comprehensive databases generated from conservation practitioner applying regular monitoring methodologies has increased the knowledge on the distribution and abundance of different plastic items over multiple habitats in Príncipe (**DI-A01**,**DI-C16;** Annex 5 Fig S1.2, S1.6). The project also generated new knowledge on the behavioural drivers of fishing net discarding, net management in African SIDS and entanglement incidicines prepared scientific publication and presented at international conference (**DI-B05;** Annex 5 Fig S2.5, S2.6). There was also transfer of knowledge on international platforms during the attendance of the International Sea Turtle Symposium (Ghana, March 2025). Knowledge transfer of beach survey methods occurred when presented by FP staff (Annex 5 Fig S1.8, S1.9), there were interactions with other regional conservation practices for example with an NGO in Cameroon with subsequent communication passing on the methodology for implementation there. Furthermore, another presentation on successful engagement with youth on plastic pollution attracted numerous engagement of wider global conference attendees who were interested in implementing the Captain Fanplastic initiative (Annex 5 Fig S3.3, S3.4).

4.5 Capacity building

Invited to present and won travel grant to present at first international conference (1 man: 1 women)

5 Monitoring and evaluation

During the project a Change request had to be submitted regarding the **Indicators 0.2 & 1.2** within **Output 1** (Annex 2). Practical field training of sampling methodologies by members of the FP, after initial training from technical consultant to wider stakeholders was very successful for the both the embedding of skills and learning. A key learning this year was the capacity for time of the habitat monitoring the FP staff have alongside other commitments. Initially the project aimed to monitor 10 in-water and 10 river mouth sites with however from initial scoping activities, site selection process and the development on sampling methodology the FP team and technical consultant concluded that the number of viable and meaningful sampling sites should be set at a lower number than initially proposed due to reasons such as; a lack considerable river mouth sites, the time and fuel constraints in utilising the boat for sampling, time available to process collected samples. For consistency and to reduce the fatigue around monitoring activities that a total of 6 in-water/ river mouth sites is the optimal number. This was adjusted and approved via a Change Request.

Overall, the M&E system and associated indicators were helpful to provide useful feedback on the project, with FP currently M&E simultaneously as implementing project activities. These have been measured by FP by implementing standardised datasheets to record the number of participants at workshops, stakeholder meetings and training events as well as the establishment of long-term monitoring databases and photographs to evidence both training and development of initiatives such as the progress towards the 'Plastic Re-use Hub'. Specific indicators that recorded 'minimum hours of training to be delivered' for both monitoring methodologies, gut content analysis and plastic categorisation (**Indicators 1.2 & 1.2**) were found to be very effective. To better improve the measure of 'increased awareness' (**Indicator 3.2**) it would be good to employ multiple pre- and post-project surveys to capture increased awareness or knowledge required from project activities. A further independent evaluation by sustainable livelihoods or business specialist would benefit creating livelihoods diversification of vulnerable groups.

6 Lessons learnt

Citizen science apps such as MDT can provide an engaging way for communities to be involved in collecting data about issues such as plastic pollution. Due to the existence of baseline data of beach plastic pollution from the previous Whitley Awards project meant that a new list on the app dedicated to FP with local names and commonly seen items were easily implemented to data collection on the island. Initially this use of the app in the 'Jovens pelo Planeta' programme worked successfully to engage members of youth local groups in data collection in their local communities (**activity 3.1**). Unfortunately, due to software update the app no longer operated on the phones purchased for this activity, furthermore the lack of Wi-Fi connectivity in some more remote communities posed difficulties in data upload. Therefore, the FP team have overcome this issue by providing the specially curated list to the participants on paper which can then be uploaded manually, allowing the members of focal groups to still participate actively citizen science initiatives.

The project team faced issues of research fatigue amongst the fisher communities of Príncipe regarding participation in the surveys (**activity 2.3**). This meant that responses particularly from one key fishing community (Abade) agreed to give less responses than was anticipated. However, using data from the latest census the responses received (n=51) still captured responses over half of fishers that use nets on island. As with the surveys community engagement, especially with fishers, was challenging. The FP team found it difficult to find a good time to gather people together with some not being present in the communities, with some being unwilling to listen. Therefore, it was concluded that in future it would be advantageous for the FP staff to think about another strategy to make the community feel more valued and interested in raising awareness by using novel or interactive approaches.

Regarding the "Plastic Re-use Hub" (**Output 4**) there was interest in participation from women and young mothers in the community for such an initiative as an option for income diversification. Unfortunately, vital parts of the machinery broke this was then followed by long-delays of replacing the parts due to delivery and import issues to the island. Therefore, for other projects wishing to include waste valorisation for alternative livelihoods, it would be important to

have spare parts for the machines in-situ, especially if the location experiences similarities to Príncipe's remoteness and double insularity that creates significant supply issues.

7 Actions taken in response to Annual Report reviews

Please ensure that supporting material is clearly referenced and easy to find in the Annex.

In further reports the project team will endeavour to make sure supporting material is clearly referenced and ordered in an easily accessible and logical way within the Annex of the reports.

Please ensure that the Darwin Initiative identity is included to a greater degree within project materials. See section 13 for more information.

The project team will ensure that when using social media accounts are the promoting the work of this project the Darwin Initiative logo and media channels will be appropriately featured. We will also ensure the logo is integrated into project materials as they workshop support materials, surveys and further publications that arise from the work of this project.

To ensure the project achieves the scalability it desires, the project team should ensure they have an appropriate exit strategy in place and to detail how local government and other stakeholders become involved. See section 12 and 16 for further information.

Community presentations to increase the number of people that have been involved in the project to aid with scalability. Each presentation has been conducted with the local government and stakeholders in mind, and they have consistently been invited to these, as well as to training events conducted previously. As part of **activity 1.7** results from all monitoring activities in Output will be presented to local authorities which will hopefully open discussion, for example about some of the items most found on beaches that show evidence of local sources. Regarding the "Plastic Re-use Hub" there are plans to get a consulting specialist to provide support in the development of business ideas and provide further financial training to ensure sustainability of these alternative income streams after the end of the project. The project team aims to place business development with this aforementioned guidance with the women involved. As for monitoring FP team have will full have autonomy to carry on with monitoring activities along their work programme, due to increased capacity in sampling methods, sample processing and database management.

Please include lessons learnt and report on the kinds of challenges that came up and how they were overcome. This is particularly relevant for the section on MEL.

These were covered in section 7 & 10 of AR1 including significant staffing issues, team capacity for monitoring and technological issues. However, will endeavour to make these clearer and reflect on them more fully in terms of MEL

No safeguarding concerns are considered in AR1 however training is declared to have happened. The project team should please ensure to detail more about their safeguarding training procedures.

From the 17th to the 25th of July, 2023, an eight-day in-person workshop was held for the lead applicant organisation (Fundação Príncipe), which focused on social safeguards, doing a stakeholder analysis, developing a stakeholder engagement plan, and a grievance mechanism. Through this training, which was attended by all FP staff, FP now has a strengthened social safeguards portfolio, which will better allow it to deliver effective conservation on the ground, and with communities and other stakeholders.

8 Sustainability and legacy

This project feeds into FP wider dedication to protect the biodiversity and the socioeconomic development of the communities of Príncipe Island. Tackling the issue of plastic pollution on the island will feed into FP's visions for the 'a pristine Príncipe for the benefit of all Príncipeans' and through the work of the Plastic Reuse Hub contributing to the mission of generating opportunities for economic and social development for the community while inspiring biodiversity conservation. The multi-angled approach of this project ensures the monitoring and understanding of current levels and impacts of plastic pollution for Príncipe as well as centring

community members at the forefront solutions and sustainable business. Therefore, the legacy from training, stakeholder engagement and awareness raising is enhanced local and institutional capacity to monitor and understand solutions to this threat which in turn elicits behaviour change, stewardship of marine biodiversity and support for alternative livelihoods for vulnerable groups. To date, this project has resulted in increased knowledge on threat of plastic pollution and increased skills in monitoring as well as beginning to generate socio-behavioural drivers of issues such as discarding fishing gear. This data has not previously been available for Príncipe or regionally, which can be used to support decision making and evaluate imposed island-wide solutions. Additionally, by targeting increased capacity and training of individuals within FP, other organisations and within communities we are ensuring an increase in institutional capacity and dissemination of knowledge across a range of stakeholders, including the government and community members as reflected by the demographics of attendees at training workshops (**activity 1.3 & 2.2**).

Plastic Reuse Hub in new OCEAN proposal

The successful implementation of environmental monitoring for plastic pollution in numerous habitats, now with extremely minimal input from the technical consultant (**Output 1**) the increased capacity and capability in the FP team shows strong evidence of the ability that this will continue to remain consistent after the Darwin grant finishes. A regular monitoring strategy is important to build on the baseline data collected in this project to monitor change. This will be decided by participants trained through the project, to ensure a consistent data collection effort beyond the lifetime of the project. Through citizen science initiatives and community-based dissemination (**Output 3**) skills, learning and the awareness of the issue of plastic pollution from the project by the FP team, members of the 'Plastic Re-use Hub' and communities will be embedded into other work and the culture of the island. This is likely to be able to be scaled nationally to São Tomé with the aid of colleagues in other organisations by providing the learning, materials and protocols to scale up activities. All workshop materials now exist in Portuguese and English meaning these can be easily disseminated to various stakeholders to scale regionally or to share with other SIDs.

9 Darwin Initiative identity

For outputs produced within this project such as presentations and publications on the drivers of fishing net discarding the Darwin Initiative funding was recognised as a distinct project with a clear identity. The logo has been used on all training documents, conference posters and presentations. UK government contribution to the project's work has been recognised in the International Sea Turtle Symposium posters and presentation. As well as within the acknowledgements in the scientific publication draft.

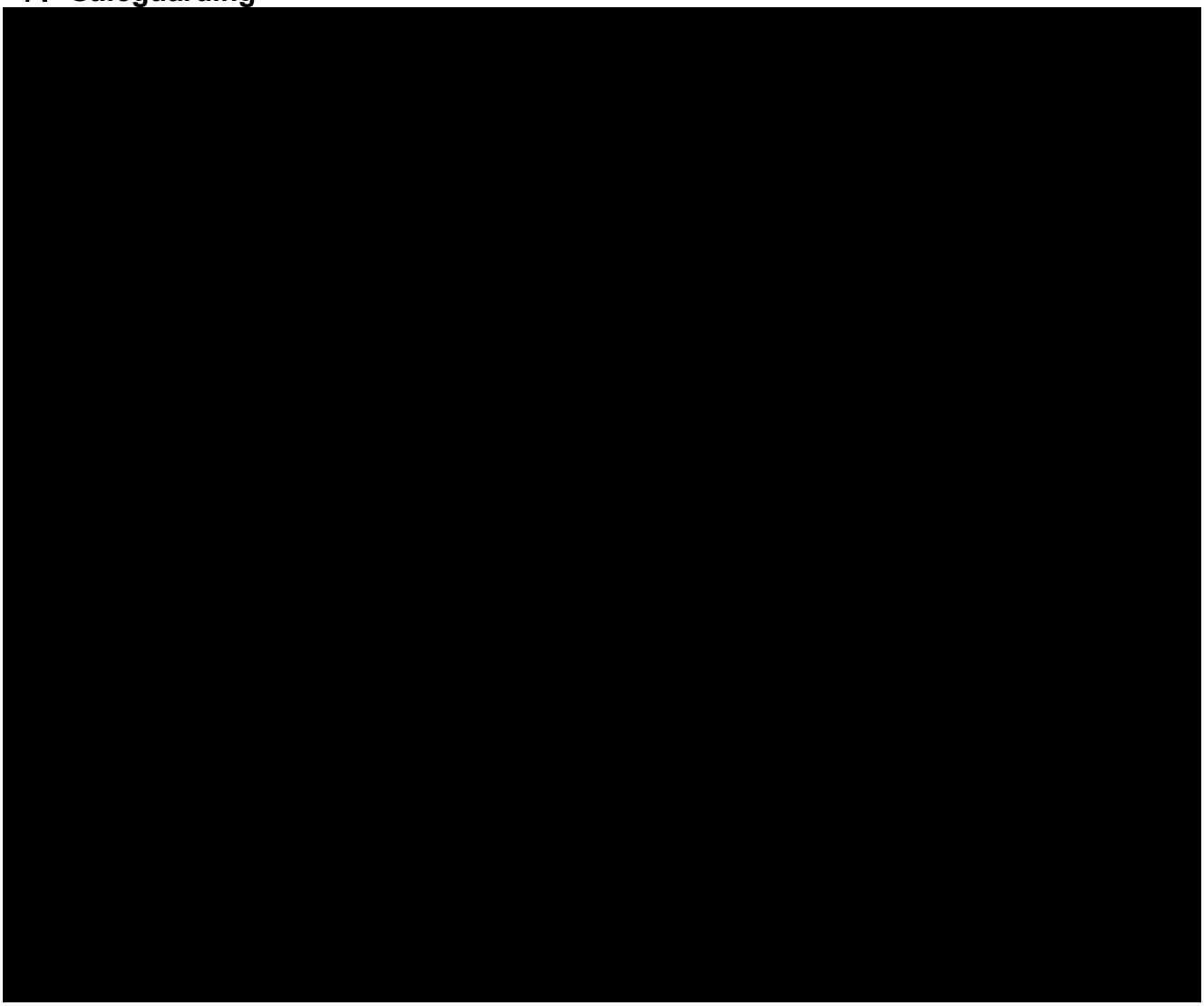
10 Risk Management

Risk Description	Impact	Prob.	Gross Risk	Mitigation	Residual Risk
Fiduciary (financial): Project funds will be solely managed by FP's financial team, however, there is a risk of internal mishandling and misappropriation of funds either unintended or for personal gain.	Moderate	Rare	Minor	FP employs strict financial management and reporting guidelines in line with international donor required standards. Accounting and bookkeeping services are outsourced to accounting firm Spyglass and accounts are audited on an annual basis by professional services firm Deloitte. This ensures full legal compliance and regular monitoring.	Insignificant
[redacted]				[redacted]	[redacted]

[redacted]				[redacted]	
Delivery Chain: The project's delivery model relies on the successful engagement of local fishing communities, coastguards and government technicians in training workshops, surveys, and other activities. This cooperation underpins the project and previous experience suggests it is not guaranteed. There is, therefore, a risk that it will not materialize.	Moderate	Unlikely	Moderate	FP strives to build and maintain trustful and productive relations with all local stakeholders through continuous engagement in its projects, namely those part of its marine programme. This pre-established relationship with local communities and authorities will underpin future engagements, promoting fruitful cooperation.	Minor
Príncipe's remoteness and double insularity create significant supply, logistical and travel difficulties. Equipment shipping is a lengthy and arduous process and inter-island flight suppressions are commonplace. The island also regularly suffers from fuel and electricity shortages which delay activities.	Minor	Possible	Moderate	FP has acquired significant adaptability in response to the island's regular shortages. This is primarily based on thorough pre-emptive planning and proficiency at locally developing second-best solutions. Equipment is procured in advance and flight layovers account for suppressions. Logistics are arranged with partners and fuel is stockpiled for emergencies.	Minor
Recent national and regional elections are expected to change the political landscape once the newly elected officials take office. In Príncipe, the incumbent party won the elections, whereas on a national level the opposition party displaced the existing government. In either case, officials are likely to change over coming months.	Minor	Unlikely	Minor	FP continuously strives to engage the local government in all its projects and employs significant efforts in building productive working relations with the multiple relevant departments. The regional government's continuity is expected to preserve past work, nevertheless, renewed engagement will be crucial to ensure support from new officials.	Insignificant
Medical facilities, supplies and health workers are scarce and insufficient to meet local needs. Severe injuries or health issues are often directed to the main island of São Tomé, or Europe, posing a significant risk for the project team and, consequently, the timely implementation of project activities	Moderate	Rare	Minor	Organisational guidelines are in place to preclude any preventable injury and all FP employees are covered by employment injury insurance. In the event of emergencies, FP is also supported by a local partner's expatriate medical team experienced in less developed scenarios.	Insignificant
Unexpected staff changes: key members of the project team could face medical	Moderate	Unlikely	Moderate	Other staff members will be recruited and training to perform all tasks needed	Moderate

issues or unexpected events or be absent due to extended periods of leave e.g. maternity leave. The project could experience possible delays to activities, as these key staff members hold overall management or expertise to complete them.				when planned extended leave is expected. Increased capacity via training will result in multiple members of the team having the ability to complete specific project tasks.	

11 Safeguarding



12 Finance and administration

12.1 Project expenditure

Complete the expenditure table below, providing a breakdown of salaries, capital items and explanations of 'Other' costs. If the budget was changed since the project started, please clarify the main differences. **Explain in full** any significant variation in expenditure where this is +/- 10% of the approved budget lines.

Project spend (indicative) since last Annual Report	2023/24 Grant (£)	2023/24 Total actual Darwin Initiative Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)	[redacted]			
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
TOTAL	**£193.900**	**150.073,12**	**22,6%**	

Staff employed (Name and position)	Cost (£)
Estrela Matilde – Litoney Executive Diretor	[redacted]
Danuiele Gidsicki – Gestora do Protetuga	
Jaconias Semendo -	
Jormicilesa Dias	
Belzamiel Umbelina	
Huarton Carvalho	
Alcino Soares	
Abdulay Pina	
Ibizatino Luís	
Pascoal Monteiro	
Edmar Fernandes	
Manuel Maquengo	
Samuel Fernandes	
Carlos Sanches	
Suzete Sousa	
Valdir Sousa - Edmilson Santos - Priscá	
TOTAL	

Capital items – description	Capital items – cost (£)
N/a	
TOTAL	

Other items – description	Other items – cost (£)
N/a	
TOTAL	

12.2 Additional funds or in-kind contributions secured

Matched funding leveraged by the partners to deliver the project	Total (£)
N/a	
TOTAL	

Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project	Total (£)
N/a	
TOTAL	

12.3 Value for Money

FP as in NGO specialising in implementing conservation projects in partnership with regional authorities and local communities are designed to prioritise the maximization of value for all beneficences. It was our intention to ensure that the resources available were used to achieve the best project outcomes and results aiming to contribute to the sustainability of skills development, knowledge transfer and poverty reduction of the stakeholders and communities engaged with. As well as applying resource management to optimise expenditure to take necessary actions to ensure that resources maximise the quality of the outputs.

Evidence based on:

Economy: The project ensured cost-effectiveness utilising local expertise and existing infrastructure. In-water sampling net used local trade business in construction based on plankton net, decreasing the cost importing or buying a plankton net ultimately making a blueprint for a low-cost sampling option which can be easily maintained or replaced on the island. This option used locally available materials to ensure affordability without compromising on quality. Additionally by leveraging existing infrastructure such as a previous office buildings to be used for the development for the dedicated shop space for the 'Plastic Reuse Hub'.

Efficiency: Multiple activities from different Outputs were integrated in one cohesive framework in terms of delivery. Technical consultants visits included the delivery of multiple workshops and practical training sessions in which multiple stakeholders from the project attended. Training and capacity building initiatives for monitoring protocols and conference presentation skills were focused on ensuring that FP staff could independently sustain these activities beyond the end of the project, meaning there would be no dependent on long-term external support.

Effectiveness: Through the projects M&E mechanisms the delivery team were able to track progress of capability and capacity building. Attendance records were conducted assess both key stakeholders training in monitoring and standardised methodologies as well as local communities actively engaged to increase the awareness of plastic pollution via initiatives such as Captain Fanplastic. By addressing barriers to participation such as infrastructure and skill development for women the project ensured that alternative livelihood businesses for women and young mothers resulted in the provision of long-term socio-economic improvements.

Equity: There was a large focus of the project promoting GESI. Women and youth were prioritised within different activities during the project e.g. youth education and engagement (Output 3) and the creation of alternative income opportunities from the women-led 'Plastic Reuse Hub'. Furthermore inclusion initiatives such as training workshops allowed for the participation of women promoted equal access to capacity building and skill development opportunities for example 26 men and 22 women were trained in methodology and classification techniques during the project.

13 Other comments on progress not covered elsewhere

Unfortunately, there was significant staffing issues at the beginning of the project. The FP team faced some medical issues, and as key project staff members, that created some delays with project activities. However, these delays have not had considerable impacts for the project as we managed to have other FP staff members stepping in ensuring the implementation of the activities. Belzamiel suffered a car accident in May 2023. Fortunately, was not seriously injured, however we did lose our marine vehicle and Belzemiel had to be in São Tomé Island for a couple of months to do all the medical examinations and monitoring. We managed to secure the relevant activities despite this accident, so there was no substantial impact on the project. Jormicilesa was absent on maternity leave, however, another biologist was hired into the team and to replace her during her absence and enhance our team.

Another issue during the project was transport. For most of the project there was only one FP car to support all the teams, and scheduling activities has been difficult so as not to clash with the activities of other teams. Weather and boat issues creating issues for accessing remote beaches/ in-water sites in the South of Island. Some were switched to access by car.

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

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

Image, Video or Graphic Information:

File Type (Image / Video / Graphic)	File Name or File Location	Caption, country and credit	Online accounts to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No

Annex 1 Report of progress and achievements against final project indicators of success for the life of the project

Project summary	Progress and achievements
Outcome The impact of plastic pollution on the communities and biodiversity of Príncipe is mitigated through long-term monitoring, increased awareness and equitable and sustainable community-driven solutions	
Outcome indicator 0.1 At least 6 FP staff members, 2 coast guard members and 1 regional government staff are trained in monitoring and standardised reporting in the first year of the project	The project has provided extensive training in country to 101 individuals across (54 men, 47 women) individuals across FP staff, coast guard members and the Fisheries Director as a regional government representative. This has increased institutional and local capacity to collect scientific monitoring and standardised classification of reporting of plastic pollution across multiple habitats. The core FP team have provided training of these methodologies independent of the technical specialist and presented these methods to regional and international stakeholders at the International Sea Turtle Symposium, Ghana 2025 (Indicator 1.1; section 3.1 and Annex 5).
Outcome indicator 0.2 At least 10 beach, 10 in-water and 10 river mouth habitats receive monthly monitoring and standardised reporting of marine turtle impact events during the lifetime of the project. [redacted]	At the end of the project 11 beaches and 6 in-water/river mouth sites are receiving monthly monitoring. This was aided by extensive training on beach methodology, the in-water and river mouth sampling methods being finalised, and sites selected. It became apparent through increased knowledge of the number of sites and the time constraints on capacity for visiting in-water/ river mouth sites that for consistency and to reduce the fatigue around monitoring activities that a total of 6 in-water/ river mouth sites is the optimal number. Overall, this had led to two comprehensive databases with data from over a year-long period. Long-term establishment of the data collection regime that can be used to inform decision making processes in the future in Príncipe (Indicator 1.1; 1.2; section 3.1 and Annex 5).
Outcome indicator 0.3 At least four sustainable women and young mother-led alternative livelihoods businesses based on plastic re-use products are in place on the island, with a minimum of 20 women and young mothers increasing their monthly income by 20% until the end of the project.	In total 18 women and young mothers were trained on the machine to make the plastic re-use products. The 'Plastic Re-use Hub' now has a dedicated space for production and selling products. Members have also agreed for products to be displayed in the major hotels on the island to have access to selling to visiting tourists (Indicator 4.1; section 3.1 and Annex 5). Due to unforeseen machinery issues and delays of importing new parts meant that members needed to seek alternative employment in Autumn 2024. As soon as the machinery could be fixed and launched a new training campaign in February 2025, currently 6 women are working part-time at the "Plastic Re-use Hub", it hoped that work to develop

	participatory business plans providing a stable income increase can be continued in future projects (Indicator 4.2, 4.3).
Outcome indicator 0.4 At least 50% of the island's population (~4000 people) has increased awareness regarding plastic pollution by the end of the project	Local communities have been actively engaged to increase the awareness of plastic pollution; from the FP staff and wider stakeholders, women at the 'Plastic Re-use Hub', children involved in 'Joven pelo Planeta' (5 individuals), children attending Captain Fanplastic (200 primary, 700 secondary school aged children (Indicator 3.2; section 3.1; and Annex 5). Further knowledge dissmination was carried out in Year 2 within the communities and despite challenges of engagement fatigue reached 53 people (28 men, 25 women). Additonally, 11 important stakeholders attended a presentation of the final resutls of the project; these included the Secretary of the Biosphere Reserve, the Director of fisheries as well as other members of the local authorities and major businesses on the island.
Output 1 Local stakeholders (FP, government, coastguard, communities) have increased capacity and capability to monitor plastic pollution at beaches, in-water and river mouths and knowledge of marine plastic pollution distribution across Príncipe	
Output indicator 1.1 A minimum of 50 hours of training delivered on monitoring methodologies in different habitat sites to at least 6 FP staff members, 2 coast guard members and 1 regional government staff, in the first year of the project	Successful training in and establishment of plastic pollution methodologies (both beach and in-water surveys) and implementation of monthly monitoring activities to input into a year-long baseline of plastic distribution. Training workshop on using in-water sampling equipment and methodologies; trawling (Aug/Sep 2023) with key FP team member leading on training (**activity 1.1 & activity 1.2**). 26 individuals (17 men, 9 women) across local partners receiving training in monitoring methodologies. This includes FP staff, coast guard members and the regionally fisheries officer from the government. Methodology presented at public presentation (Aug 2023). Training workshop with local partners; 22 (9 men, 13 women) attendees Jan 2024 on analysis of collected samples and standardised plastic pollution categorisation (**activity 1.3**). For this guidance materials and protocols were developed for in digital and physical form; standardised categorisation instructions translated into Portuguese (**activity 1.3**).
Output indicator 1.2 By the end of the project, a comprehensive year-long baseline database of plastic pollution distribution on the island exists, covering at least 10 nesting beaches, 10 in-water sampling sites and 10 river mouths. [redacted]	11 beach sites are now receiving monthly monitoring and standardised classification of plastic litter after attendance of 2 FP staff and other local stakeholders attending workshop events (Jan 2024). A continuation of beach survey methodologies have fed into a baseline database (**activity 1.5**). In-water methodologies were refined, and potential sites visited to provide information for site selection. Technical consult and FP collaboratively completed decision making on sites using information on sea turtle foraging areas. It became apparent to the FP team and technical consultant that 20 in-water/ river mouth sites were overly ambitious considering numerous constraints e.g. boat access, sample processing time and lower numbers of river mouth sites. To ensure consistency and reduce the fatigue around monitoring activities that a total of 6 in-water/ river mouth sites is the optimal number (**activity 1.4**) (section 3.1, 7 and Annex 4). In-water monitoring surveys completed from Oct 2023 with key FP team member now leading on

	training with local stakeholders (**activity 1.5**). Technical consultant supported in the creation of a new database to record in-water survey efforts and plastic categorisation these were combined in a meta-database creation with accessibility for analysis for potential scientific publication with additional guidance for data analysis (**activity 1.6**). Results from both surveys methods were presented to local authorities and other stakeholders (Mar 2025) as well as being featured in poster presentation at the International Sea Turtle Symposium Ghana March 2025 (**activity 1.7**) (section 3.1 and Annex 5).
Output 2. There is a centralised reporting mechanism for local stakeholders to record ingestion/entanglement events and marine turtle interactions in Príncipe	
Output indicator 2.1. A minimum of 25 hours of training are delivered to at least 6 FP staff members, 2 coast guard members and 1 regional government staff on turtle necropsy and plastic ingestion analysis, by the first year of the project	Technical consultant provided learning material and scientific publications of the impact of plastic ingestion on marine turtles to FP team for theoretical training. FP presented theoretical impact of plastic ingestion on marine turtles at public presentation to local partners (Sept 2023) (**activity 2.1**).26 people (17 men, 9 women) and 22 people (9 men, 13 women) attended two workshops held Jan 2024 on assessing plastic ingestion and categorisation of ingested plastic in internationally standardised protocols. Guidance materials and protocols developed for in digital and physical form; GI tract processing instructions translated into Portuguese (**activity 2.2**). Due to a lack of stranded marine turtle occurrences in year 1 of project the physical workshop by the technical consultant for the FP team and local stakeholder using fish gastrointestinal tracts (GI) to provide context to processing sea turtle gut content. Digital and physical guidance materials in Portuguese were produced to support the team if a stranded turtle was to occur (**activity 2.2**) (section 3.1 and Annex 5).
Output indicator 2.2. At least 50% of fishers on the island are interviewed and provide insights on the regional occurrence of entanglement incidents	Technical consultant worked alongside FP team to develop a questionnaire about discarding fishing gear; including questions on net use, opinions and perceptions about discarding behaviours and the frequency of entanglement events. This questionnaire received ethical approval by the University of Exeter and was trailed in Oct 2023 and was fully implemented in Jan 2024 (**activity 2.3**). The questionnaire was carried out in 8 communities and 51 fishers, so 52% (n=97) of fishers on the island were interviewed (section 3.1 and Annex 4). Technical consultant completed data analysis including; fishing net discarding rates, Theory of Planned Behaviour, community-led solution ideas and the frequency of reported entanglement events (**activity 2.3**). Technical consultant has worked with FP staff collaboratively on a scientific publication draft from the results of the surveys (**activity 2.4**). Results disseminated to local authorities and other stakeholders (Mar 2025) as well as being featured in an oral presentation at the International Sea Turtle Symposium Ghana March 2025 (**activity 2.5**). (section 3.1 and Annex 5).
Output 3. The local communities are empowered to monitor, and have increased awareness of, the issue of plastic pollution via the deployment of citizen science tools and knowledge exchange presentations	

Output indicator 3.1. By the end of the project, 70% of attendees of focal groups are using the citizen science tools	Technical consultant and FP team worked is create an island specific list of litter items in internationally recognised citizen science tool Marine Debris Tracker app (MDT). Technical consultant provided training to FP team on using the app (**activity 3.1**). The FP team created the 'Jovens pelo Planeta' campaign and recruited 5 individuals to take part (**activity 3.2**). However, this citizen science tool requires access to a mobile phone and consistent WiFi access which proved challenging this was overcome by moving to an offline list and FP team entering data to MDT database utilising website upload (**activity 3.2**). Technical consultant provided standard data to input into citizen science tools to fishers and those who work as on-water tour guides for hotels on the island (**activity 3.3**). Monthly knowledge dissemination presentations were difficult to establish due to engagement fatigue within the communities, however knowledge exchange presentations and practical sessions on monitoring methodologies were completed in 5 communities over 3 intensive periods in Year 2; 53 people (28 men, 25 women) (**activity 3.4**). Reports were produced to record information and questions posed by fishers and other community members which was used in final project presentation to 11 important stakeholders in March 2025 (**activity 3.5**) (section 3.1 and Annex 5).
Output indicator 3.2. By the end of the project, and as a result of information sharing through events and media outlets, at least 50% of engaged stakeholders demonstrate an increase in awareness of the impacts of plastic pollution	Outreach events were conducted via the Captain Fanplastic framework with school children (2000 primary and 700 secondary aged children across the island) to increase awareness in youth groups on the island (**activity 3.1**). Results from these activities were presented to local authorities and other stakeholders (Mar 2025) as well as being featured in poster presentation at the International Sea Turtle Symposium Ghana March 2025 (**activity 3.6**). Monthly knowledge dissemination presentations were difficult to establish due to engagement fatigue within the communities, however knowledge exchange presentations and practical sessions on monitoring methodologies were completed in 5 communities over 3 intensive periods in Year 2; 53 people (28 men, 25 women) (**activity 3.4**). Reports were produced to record information and questions posed by fishers and other community members which was used in final project presentation to 11 important stakeholders in March 2025 (**activity 3.5**) (section 3.1 and Annex 5).
Output 4. Young women and mothers at risk have established enterprises supported by the "Plastic Re-use Hub" which generate alternative income streams and improve local livelihoods	
Output indicator 4.1. By the third quarter of year two, there is a viability assessment of at least 20 women and young mothers' needs and ideas for alternative income initiatives from plastic re-use products	Meetings were held with an initial group of 5 women to establish the main team to the 'Plastic Re-use Hub' (**activity 4.1**). An intial group of 5 women was established and the group voted a leader of the group who has previously won an FP challenger for sustainable products (**activity 4.1**). These members further contacted 7 women who were unemployed to become members and running community training workshops (**activity 4.3**). Once the beach plastic from the monitoring activities (Output 1) had been classified the appropriate polymer types of plastic litter are taken to be the hub to be incorporated into the re-use products

	(**activity 4.2**). In addition, further structured beach litter collection events were organised to collect material for the use in the products, targeting the polymers needed for use on the machines (**activity 4.2**) (section 3.1 and Annex 5).
Output indicator 4.2. By the end of the project, at least 4 sustainable enterprise ideas focused on the plastic issue and supported by participatory business plans have been successfully implemented through the 'Plastic Re-use Hub'	Within Year 1 of the project 5 women are full-time working and managed the functional running of the hub and contacting further members, especially targeting young mothers and women who are unemployed; with a further 7 women receiving training (**activity 4.3**). Unfortunately, within Year 2 some of the vital machinery at the "Plastic Re-use Hub" broke and delays were experienced during importing a replacement. This caused some members to leave to alternative employment. Once the machines were fixed 6 women joined as members and received training and are currently working part-time (March 2025). It is hoped this can be a catalyst that the work on at the Hub can continue within future projects in which the members can be supported to development participatory business plans (**activity 4.4 & 4.5**) (section 3.1 and Annex 5).
Output indicator 4.3. By the end of the project, at least 20 female members of the 'Plastic Re-use Hub' will report an increase of 20% in their monthly income	The "Plastic Re-use Hub" continues to develop as a waste-based sustainable enterprise (**activity 4.6**), a shop space continues to be developed in a central location in Santo Antonio to sale products, there is also plans for discussions with major hotels to stock products to sell to visitors to the island. Furthermore the members of the "Plastic Re-use Hub" took part in island-wide community events such as the Environmental Education Fair called the "Biosphere Fair" in June 2024 (**activity 4.3; Fig 3**). Many visitors to the fair stopped and commented at they were amazed by the products, which are new to the island and that they brough them hope for the reduction of plastic pollution (section 3.1 and Annex 5).

Annex 2 Project's full current indicators of success as presented in the application form (unless changes have been agreed)

Project summary	SMART Indicators	Means of verification
Outcome: The impact of plastic pollution on the communities and biodiversity of Príncipe is mitigated through long-term monitoring, increased awareness and equitable and sustainable community-driven solutions	0.1 At least 6 FP staff members, 2 coast guard members and 1 regional government staff are trained in monitoring and standardised reporting in the first year of the project 0.2 At least 10 beach, 10 in-water and 10 river mouth habitats receive monthly monitoring and standardised reporting of marine turtle impact events during the lifetime of the project [redacted] 0.3 At least four sustainable women and young mother-led alternative livelihoods businesses based on plastic re-use products are in place on the island, with a minimum of 20 women and young mothers increasing their monthly income by 20% until the end of the project. 0.4 At least 50% of the island's population (~4000 people) has increased awareness regarding plastic pollution by the end of the project.	0.1 Attendance records, photographs, schedule of training events 0.2 Monthly database entry records for selected habitat sites, photographic documentation of marine turtle-plastic interactions 0.3 Minutes of the inaugural meeting of the 'Plastic Re-use Hub', monthly income records of participants 0.4 Attendance records of focal group members involved in citizen science and knowledge exchange activities, pre- and post- project surveys, photographs of activities
Output 1 Local stakeholders (FP, government, coastguard, communities) have increased capacity and capability to monitor plastic pollution at beaches, in-water and river mouths and knowledge of marine plastic pollution distribution across Príncipe	1.1 A minimum of 50 hours of training delivered on monitoring methodologies in different habitat sites to at least 6 FP staff members, 2 coast guard members and 1 regional government staff, in the first year of the project. 1.2 By the end of the project, a comprehensive year-long baseline database of plastic pollution distribution on the island exists, covering at least 10 nesting beaches, 10 in-water sampling sites and 10 river mouths [redacted]	1.1a Training reports including workshop attendance records, fieldwork logs, photographs 1.1b Quarterly meeting minutes about monitoring progress with Project Advisor 1.2 Offline datasheet with inputted data
Output 2 There is a centralised reporting mechanism for local stakeholders to record ingestion/entanglement events and marine turtle interactions in Príncipe	2.1 A minimum of 25 hours of training are delivered to at least 6 FP staff members, 2 coast guard members and 1 regional government staff on turtle necropsy and plastic ingestion analysis, by the first year of the project 2.2 At least 50% of fishers on the island are interviewed and provide insights on the regional occurrence of entanglement incidents.	2.1a Attendance records, photographs 2.1b Meeting records of meetings with regional veterinary specialists, photographs 2.2a Fisher interview transcripts, attendance records, photographs

		2.2b Occurrence report published and presented to fishers, attendance records, photographs
Output 3 The local communities are empowered to monitor, and have increased awareness of, the issue of plastic pollution via the deployment of citizen science tools and knowledge exchange presentations	3.1 By the end of the project, 70% of attendees of focal groups are using the citizen science tools 3.2 By the end of the project, and as a result of information sharing through events and media outlets, at least 50% of engaged stakeholders demonstrate an increase in awareness of the impacts of plastic pollution.	3.1 Focal group meeting minutes, questionnaires on continued attendance, record of inputted data through citizen science tools 3.2a Documented broadcast through local news, published reports, social media posts about activities in monthly outreach events 3.2b Pre- and post- project surveys
Output 4 Young women and mothers at risk have established enterprises supported by the "Plastic Re-use Hub" which generate alternative income streams and improve local livelihoods	4.1 By the third quarter of year two, there is a viability assessment of at least 20 women and young mothers' needs and ideas for alternative income initiatives from plastic re-use products. 4.2 By the end of the project, at least 4 sustainable enterprise ideas focused on the plastic issue and supported by participatory business plans have been successfully implemented through the 'Plastic Re-use Hub' 4.3 By the end of the project, at least 20 female members of the 'Plastic Re-use Hub' will report an increase of 20% in their monthly income	4.1a Focal group meeting minutes, attendance records, photographs 4.2a Sustainable business plan report 4.2b Social media posts on the opening of the 'Plastic Re-use Hub' 4.3 Monthly income records, sales records or plastic re-use products

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

Output 1:

1.1Training and capacity building workshop for local stakeholders (e.g., FP team, government, coastguard) in practical beach survey methodologies

1.2Training and capacity building workshop for local stakeholders on in-water sampling equipment and methodologies

1.3Training workshop on analysis of collected samples and standardised plastic pollution categorisation

1.4 Consulting expert and FP team to establish beach, in-water and riverine monitoring sites using previous interview information from fishers

1.5 Implementation of monthly beach and in-water monitoring surveys by local stakeholders at selected sites

1.6 Consulting expert to support in database management, analysis and production of written report for dissemination and potential scientific publication

1.7 Present results to local authorities and other stakeholders promoting community engagement

Output 2:

2.1 Consulting expert to provide presentations on current knowledge of impact of plastic pollution in marine turtles with theoretical training for FP team and local stakeholders

2.2 Training workshop (with regional veterinary collaboration) on necropsy methodology and sample analysis for plastic ingestion investigations for local stakeholders
2.3 Interview fishers on local knowledge on the issue of ALDFG, fishing gear discarding and occurrence of entanglement events

2.4 Consulting expert to support capability development of FP's team on report writing and scientific data publication

2.5 Present results to the local authorities and other stakeholders

Output 3:

3.1 Plan and conduct meetings with local community focal groups and schools to provide training in the use of citizen science tools to monitor beach litter

3.2 Establish monthly outreach events with schools to monitor selected beaches in combination with knowledge dissemination presentations

3.3 Plan and conduct meetings with local fisher groups to provide training in the use of citizen science tools to monitor in-water plastics and entanglement events

3.4 Establish monthly meetings with fishers on monitoring in combination with knowledge dissemination presentations

3.5 Creation of database with data collected during monthly meetings and fishers' input and subsequent analysis and reporting to local authorities

3.6 Presentation of the results to the local stakeholders through events and media outlets

Output 4:

4.1 Plan and conduct meetings with local women's groups (e.g., young women and mothers) on the creation of the "Plastic Re-use Hub"

4.2 Produce a targeted beach litter collection campaign for plastic waste to be used in the creation of products (e.g., "Eco-bricks" or accessories)

4.3 FP team to organise and lead community workshops on how to produce waste-based products (e.g., "eco-bricks")

4.4 Follow-up meetings with focal groups and assessment of business ideas resulting from the "Plastic Re-use Hub" to ensure the future sustainability of initiatives

4.5 Support women and young mothers in the development of business plans for sustainable plastic re-use-based initiatives

4.6 Establishment and organisation of the "Plastic Re-use Hub" to promote the development of waste-based sustainable enterprises and serve as sale point for products

Important Assumptions

Approach to training workshops will be effective in increasing knowledge and capability for monitoring by local stakeholders

Fieldwork logistics and constraints will allow monthly monitoring of multiple sites

There is participation from members of focal groups from community in citizen science tools

There is participation from young women in the "Plastic Re-use Hub"

Targeted collection for plastic will generate enough material to be used in the creation of re-use products

Alternative income sources can be generated via selling of products from the "Plastic Re-use Hub"

Table 1 Project Standard Indicators

DI Indicator number	Name of indicator	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total achieved	Total planned
DI-A01	The number of people from national and local stakeholders completing training on monitoring methodologies in different habitat sites	People	Men Women	48 (26 men, 22 women)	53 (28 men, 25 women)	N/A	101 (54 men, 47 women)	9
DI-C16	A comprehensive baseline database of plastic pollution distribution over multiple habitats. Covering a period of one year by the end of the project.	Number	Categorised plastic pollution database	2	Continued 2	N/A	2	2
DI-B05	50% of fishers on the island are interviewed and provide insights on the regional occurrence of entanglement incidents	Proportion	Men Women	52%	N/A	N/A	52%	50%
DI-A02	Number children completing placements as "biosphere guardians" and using app for the collection of citizen science data	People	Gender Age Group Stakeholder group: Local communities Training typology: plastic pollution monitoring	5 (youth)	Continued 5 (youth)	N/A	5	UNK
DI-A04	Number of engaged stakeholders that demonstrate an increase in knowledge of plastic pollution due to the creation of multiple dedicated communications or outreach events	People	Gender Age Group Stakeholder group: Local communities Training typology: plastic pollution monitoring	2705 (youth) 48 (adult/ community) (26 men, 22 women)	53 (adult/ community) (28 men, 25 women) 11 (stakeholders/local authorities)	N/A	2817	UNK
DI-B04	An assessment of at least 20 young women and mothers needs and ideas for the viability of alternative income from plastic re-use products	Number	Business plans for alternative livelihoods/ income from	5 women (full-time)	6 women (part-time)	N/A	18	20

DI Indicator number	Name of indicator	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total achieved	Total planned
			plastic re-use products	+ 7 trained				

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the **correct template** (checking fund, type of report (i.e. Annual or Final), and year) and **deleted the blue guidance text** before submission?	
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	
Is your report more than 10MB? If so, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line. All supporting material should be submitted in a way that can be accessed and downloaded as one complete package.	
If you are submitting photos for publicity purposes, **do these meet the outlined requirements (see section 14)?**	
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	
Have you involved your partners in preparation of the report and named the main contributors?	
Have you completed the Project Expenditure table fully?	
Do not include claim forms or other communications with this report.	