

## Darwin Initiative Final Report

*To be completed with reference to the Reporting Guidance Notes for Project Leaders (<http://darwin.defra.gov.uk/resources/>) it is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)*

### Darwin project information

Project reference	21-021
Project title	Enhancement of wellbeing and conservation in Cape Verde's biodiversity hotspots (Ref: 2324)
Host country(ies)	Republic of Cabo Verde
Contract holder institution	Fauna and Flora International (FFI)
Partner institution(s)	Fundação Maio Biodiversidade (FMB)
Darwin grant value	£237,079
Start/end dates of project	1 <sup>st</sup> April 2014 – 31 <sup>st</sup> March 2017
Project leader's name	Jack Rhodes
Project website/blog/Twitter	This project does not have a dedicated website but activities are featured on <a href="http://www.fauna-flora.org">www.fauna-flora.org</a> , <a href="http://fmb-maio.org/pt/">http://fmb-maio.org/pt/</a> and <a href="https://www.facebook.com/maioconservation/">https://www.facebook.com/maioconservation/</a>
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## 1 Project Rationale

The island of Maio sits within the southern (*Sotavento*) island chain of Cape Verde and is one of the least developed parts of the country. The population of 7,000 depends heavily on rich marine resources – the waters around Maio contribute to the livelihoods of 80% of residents.

Marine resources throughout Cape Verde have been, and remain, over-exploited. Fishing catch by international and national fleets is estimated at 12 times the official quotas, and together with a growing export market for shark fin this has had caused substantial damage to the fisheries of most of the country's nine inhabited islands. Maio's fishing fleet is artisanal, and the island's fishers strongly supported better fisheries control and management. However, they faced a dual problem in achieving this: a limited ability to monitor and control the activities of other fishing boats, and a heavy reliance on immediate income from fishing that pushed them to over-fish (and engage in other environmentally damaging activities, such as beach sand extraction) through lack of alternative income and savings. Pre-project surveys highlighted that poverty within fishing communities was linked to undeveloped income saving capabilities as much as insufficient profits from fishing.

With fish as the major source of protein for most households, and purchasing power generally low, the island's residents are vulnerable to any further reduction in fishing catch. This is especially true of women, for whom unemployment at the start of the project was 52% higher than for men.

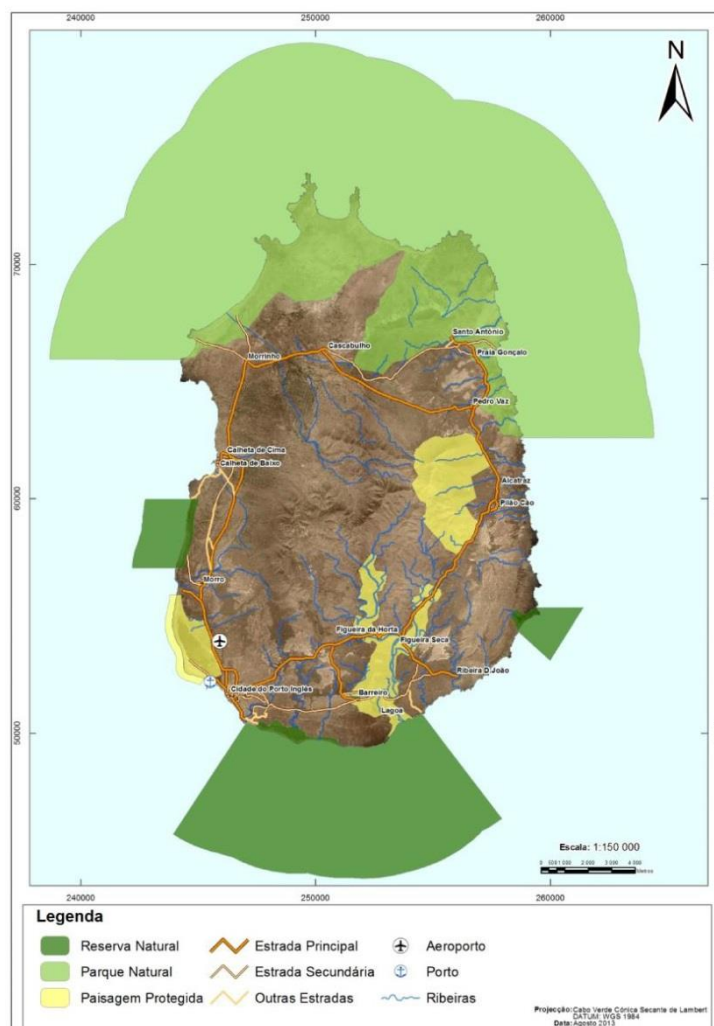
Maio's inshore waters and shoreline also support some of the most diverse marine wildlife in Cape Verde. The island's beaches host the second-largest nesting population of the Endangered north-east Atlantic population of loggerhead turtles (*Caretta caretta*), its bays hold a wide range of resident elasmobranch (such as nurse shark *Ginglymostoma cirratum*) and endemic *Africonus* species, and a number of threatened pelagic elasmobranch and cetacean species are known to use Maio's ocean shelf. Examples of these wider-ranging species are the hammerhead sharks *Sphyrna lewini* and *S. mokarran*, bentfin devil ray *Mobula thurstoni* and humpback whale *Megaptera novaeangliae*. Several threatened and endemic bird species nest on Maio's coast and feed in its waters. Targeted fishing and onshore poaching posed an immediate and critical threat to these populations, with 42% of nesting adult loggerhead turtles killed for meat in 2011, shark by-catch at unsustainable levels [71% of artisanal and semi-industrial fishers in Maio reported sharks by-catch in 2014 (Lopes et al., 2016)] and the potential for shark finning to become an established practice on Maio as it is on other islands.

This project was designed to help address these challenges, building on the 2013 decision by the Cape Verdean Environment Ministry (Direcção Geral do Ambiente; DGA) to establish the country's first co-managed Marine Protected Areas (MPAs) in Maio. This was proposed as a pilot, which if successful could be replicated nationwide.

Shown on the map below, Maio's MPAs overlap with critical habitats and fisheries and cover an area larger than the island itself. Our national partners Fundação Maio Biodiversidade (FMB) were invited by the DGA to act as co-managers of these MPAs, which were unmanaged 'paper parks' at the time. This combination of factors provided the chance to contribute to solving the poverty and wildlife problems outlined above. Through a Darwin Initiative scoping grant this project was designed to introduce effective management of the MPAs: allowing marine ecosystems to recover from overexploitation, and providing local communities with an active and beneficial stake in the MPA network. The core means of achieving this were to be:

- Establishing a participatory MPA management system, led by local stakeholders with the individual and institutional capacity to continue management beyond the life of the Darwin Initiative grant
- Effective monitoring and surveillance of MPA management, including the development of a ranger scheme and biodiversity monitoring systems
- Clear and comprehensive communication of the aims and impacts of the MPA network throughout Maio
- The development of small business opportunities, providing a sustainable income linked to the MPA and diversifying the island's economy, with a particular focus on providing income for women – developing a homestay scheme piloted in 2013
- The introduction and widespread adoption of a savings scheme aimed at both men and women and targeted at fishing communities.

With 50% of the population of Maio under 25, the project also aimed to create opportunities for direct engagement of youth through awareness raising, participatory monitoring and training, and employment where appropriate.



Map showing Maio and the proposed MPA zoning

## 2 Project Partnerships

This project is a close partnership between FFI and FMB, and was designed jointly to fit agreed conservation and development priorities for Maio. Formally, this is underpinned by the Memorandum of Understanding agreed in advance of our initial proposal to the Darwin Initiative (DI), and by sub-grant agreements covering DI funding and all co-funding. Under the DI sub-grant agreement, FMB have provided monthly itemised cashbooks showing all project spending, and detailed six-monthly progress reports. FFI have reviewed, edited and formally approved each of these. This final report and its annexes have been prepared jointly and iteratively by FFI and FMB.

FFI and FMB have also developed a close working relationship beyond these formal agreements. Our organisations have jointly planned and implemented this project. FFI have also supported the design of new FMB-led projects, the development of an FMB strategy, financial planning and internal processes, and been closely involved in FMB staff recruitment.

This has involved open and consistent contact between the two organisations. Email contact between FMB staff and the FFI project manager has run to 50-100 messages/month, supported by Skype calls approximately fortnightly. While most day to day contact has been between the FFI project manager, FMB marine project manager and FMB Director, multiple other staff in both organisations have been involved in this grant and the wider relationship. FFI staff have visited Cape Verde for a total of 91 staff days (3 staff and 9 separate visits) during the grant period, and the FMB Director travelled to the FFI office in Cambridge for a mid-project review and the induction of a new FFI project manager in July 2015. FFI and the FMB Board have also had frequent direct contact, including meetings and/or calls approximately monthly. We expect to maintain close contact between the two organisations after the close of this grant. FFI have

allocated \$55,000 *per annum* through 2017 and 2018 (post project) from an internally-administered fund to develop FMB capacity and further improve fisheries management around Maio, and we have a detailed agreed workplan for activities to the end of 2017.

We consider this flexible and diverse relationship a core achievement of this grant. Contact between FFI and FMB was made during Darwin-funded scoping visits in 2013, and solidified in order to apply for and use DI funding. Over the course of our relationship, FMB have increased their annual turnover from 96,378 EUR (2013) to more than 300,000 EUR by 2017 and employment from 6 to 12 full time employees over the same period, with corresponding increases in their conservation and development outputs. This rate of change would not have been possible without the direct support provided by this Darwin Initiative grant and the broader institutional support provided by FFI involvement. The three-year of this Darwin grant has offered a degree of stability that is rare in donor-funded work programmes. A large grant from the MAVA Foundation, which helps secure FMB's future, builds directly on the outputs of this project and was offered on the basis of continued FFI engagement

On top of the outcome achievements presented below, we would like to highlight the success of the homestay programme in enthusing large numbers of people amongst the general public, and maintaining this public support despite needing to focus major investment on a small number of homes. This was achieved through a fair and transparent process, and providing training and marketing benefits to as many women as possible at each stage. Another major benefit of the project has been the marked improvement of FMB's internal control processes. Governance policies, and processes for financial management, health/safety and inventory control have improved to the point where FMB have been able to secure major grants without the need for FFI to take the lead partner role.

The greatest challenge faced by this relationship was internal conflict at FMB in 2015. This was to some extent precipitated by fundraising successes, which in turn increased project workload, which exacerbated personal friction within FMB and ultimately led to the departure of several senior staff. In response, FFI offered more intensive support until replacements were in place: the FFI project manager and FFI partnership development manager spent 31 days in Cape Verde over the Autumn of 2015, and with the support of the Eurasia Regional Director and other capacity team members, helped FMB to design a new organisational structure, financial and activity plans and providing operational support for conservation activities and recruitment. The new structure has proven stable and effective, and FFI engagement has since stepped back to concentrate on ensuring project outcomes and supporting FMB recruiting.

FMB – and to a lesser extent FFI – have also worked closely with a number of local partners and outside experts in Y3 to establish the MPA Monitoring Plan and *de facto* management processes. These stakeholders included: the National Directorate of the Environment (DNA), Maio's municipal government (CMM), University of Cabo Verde (UniCV), Dalhousie University, ACOPECA (the national agency responsible for fish inspections), MAA Maio (Environmental Department in Maio), AMP (Maritime and Port Agency), Police (PN), the Ministry of Education, SDTIBM (Boavista and Maio Tourist Development Agency) and INDP Maio (National Fisheries Institute).

### **3 Project Achievements**

#### **3.1 Outputs**

##### **Output 1: Capacity of FMB, co-management team and community members built to implement co-management model for the network of MPAs in Maio**

This first output was aimed at ensuring the people responsible for the management of Maio's MPA are able to do so effectively: with a clear understanding of their roles and the knowledge and skills needed to undertake their responsibilities.

Activities under this (and every other) output are detailed in Annex 2, and included capacity assessments, the development and delivery of a training programme, regular stakeholder consultation formally to agree and monitor roles, and fundraising to maintain impact beyond the life of the Darwin Initiative grant.

This output was substantially although not entirely achieved. This can be seen by taking the logframe indicators in order:

1. *Technical capacity assessed and training programmes finalised:* Following a structured capacity assessment and meetings in all 13 of Maio's villages, a training programme was designed to fill the technical and organisational capacity gaps. This was in practice not meant to be a finalised programme, but a living document, which was reviewed annually and adapted to changing circumstances.
2. *Training programmes delivered and skills assessed:* Substantial direct training was delivered over the course of this project: in total, 328 training days were attended by 1,806 people (representing 18,072 person-days of training) as detailed in Annex 2. 91 community members who received training have subsequently been involved in protected area management, 23 as volunteers and 68 employed as permanent or temporary staff. The skills of the co-management team have been reviewed against the recommended IUCN capacities for Protected Area management, in a competence review charting the change between Y2 and Y3 of this project (see annex 16). The technical skills and work of MPA rangers are monitored through weekly meetings at the FMB office and monthly visits by the FMB Marine lead to join each staff member on patrols or engagement work.

In addition, FFI provided considerable capacity and institutional support to FMB over this period. This included strategic and financial planning, helping to restructure FMB after internal problems in 2015 and the introduction of internal control processes. This support has been central to FMB's success in securing three years of post-project funding from the MAVA Foundation. A full list of all training events and workshops is included in Annex 12.

3. *Guidelines for MPA co-management developed and disseminated:* In Y1, a co-management structure for Maio's MPAs was agreed with the CMM and DNA, and through consultation meetings in Maio's villages. This structure has been publicised and followed, and has proved effective in management of the MPA. It has been built upon by specific additional agreements between the main co-management partners FMB, CMM and DNA – in particular the MPA monitoring plan agreed in Y2/Y3, and co-management protocols addressing threats such as sand extraction, fisheries monitoring and the follow-up of illegal activities detected by co-management staff. Through Y3, FMB have organised quarterly meetings of all agencies with enforcement responsibilities on Maio to co-ordinate activities and increase joint working.

The final production and dissemination across Cape Verde of co-management guidelines has not, however, been possible. This is because the national government has not approved the Maio MPA management regulations drafted in Y1 of the project. This approval is a reserved power of the National Assembly and throughout this project; the Assembly has neither rejected nor approved the regulations. This has left the existing management structure a *de facto* construct and not an official one that could be promoted nationally. Government approval of the co-management structure and regulations was Assumption 1 of the logframe, and this is one of several project outputs and outcomes affected by its breach – the measures taken in attempting to overcome this barrier are described below in the section related to Output 2 (point 2), and both FFI and FMB are continuing to lobby the government for approval.

## **Output 2: Participatory biodiversity monitoring and enforcement system in place in at least three MPAs in Maio**

This second output was designed to track the implementation and success of MPA management across Maio.

Activities under this output included the development, incentivisation and implementation of a participatory MPA patrolling system, and baseline and ongoing monitoring to track the impact of MPA management on wildlife threats and populations. Achievements are charted against the logframe indicators below. There is some ambiguity in the indicators, which set targets for annual increases/decreases rather than targets over the lifetime of the project – both overall Y1-to-Y3 targets, and year-on-year milestones, are covered here.

1. *7% annual increase in indicator species*: The following indicator species were agreed with the DNA at the end of Y1: loggerhead turtle (*Caretta caretta*) nesting population, nurse shark (*Ginglymostoma cirratum*) density in the core Praia Real population, white-faced storm petrel (*Pelagodroma marina*) population and total fish density as measured through BRUVS surveys.

Baseline data were collected in Y1 for loggerhead turtle and nurse shark indicators, and repeat surveys were conducted throughout Y2 and Y3 in accordance with the MPA monitoring plan developed through this project. Both of these indicators with Y1 baselines show Y3 increases that exceed the final output target: Y3 nurse shark density along a fixed transect was 175% of the Y1 baseline, while the 2721 loggerhead nests within the MPA were 640% of the Y1 baseline of 423. It should be noted that we cannot establish any direct causal link between MPA management improvement and these increases. The high loggerhead numbers in particular are highly unlikely to be due to project activities. However, the low proportion of nests poached in Y3 (18 nests within the MPAs = 0.7% of total (a 39.3% reduction)) and of nesting females found dead (42 = est. 6%) is a promising indication that MPA management has prevented the high mortality seen before the start of this project, and seen especially in years when there were high numbers of nests (e.g. 2011 adult mortality through poaching was estimated at 40%).

Petrel and fish baseline data were only collected in Y2 – after the indicators had been agreed. Petrel counting methods for adults, nests and chicks were further reviewed in Y3 and the methodology changed to make it more sustainable for FMB staff to continue, so the only comparable measure between Y2 and Y3 is of night-time activity during the nesting season (frequency of flights through a torch beam). This measure declined 16% between the two years, missing the output target. Fish populations were measured through standardised BRUVS surveys in Y2 and Y3: specifically the mean across several species of the Max N/hr, which is the maximum number of con-specifics observed at one time, divided by the length of the survey in hours. Within the MPAs this figure rose substantially between Y2 and Y3: by over 300%. Outwith the MPAs the indicator declined by 15%. This is a dramatic result, but is based on one year's change alone and may or may not be related to MPA management; future year data will tell. A full report of all biodiversity data is included in annex 14, and the draft monitoring plan (pending government approval) can be found in annex 18.

2. *Community rangers patrol MPAs daily and 20% annual reduction in illegal activities recorded*: Maio's MPAs have been patrolled daily from Q2Y3, following a steady increase through Y1 and Y2. Paid rangers were taken on (initially as trainees) in Y1, providing on-shore patrols 4 days/week under supervision and with a focus on the large northern MPA (PNNM). By Q2Y2 and throughout Y3 patrols were increased to 6 days/week, although not daily as one day each week is set aside to review data and adjust activities. These professional patrols still concentrate on the PNNM, where half of all patrols (3 days/week) take place, and are designed to complement nesting-season turtle patrols. Additional joint patrols between paid and volunteer community rangers were started in the RMCV MPA (the MPA nearest to villages) – these continued to run 3 days/week for the remainder of the project. In Y3, the 'Guardians of the Sea' initiative was piloted and then rolled out, in which volunteer fishermen provide daily at-sea patrolling of all six MPAs with occasional supervision by FMB staff. Collectively these patrols provide daily coverage for the three PAs with the largest marine area: PNNM, RMCV and RNPM.

We have not seen a 20% *pa* reduction in illegal activities. While there was a 25% reduction from Y1 to Y2, a subsequent increase left the Y3 figure at 89% of the Y1 baseline (and not the 64% required by the output target). It is hard to explain these changes robustly, and as MPA management processes have evolved we do not know whether this is a perceived or a real trend. The Y3 increase will to some extent be an artefact of increased patrol coverage: the introduction of the Guardians of the Sea initiative, and changes to onshore patrol coverage that saw a 10% increase in overall patrol time and a 300% increase in the patrol time committed to the five smaller MPAs. Worse weather in Y2, and so less access to beaches, was flagged in the Y2 end-of-year report as a reason for lower incident reports that year. And the failure to get the MPA regulations approved has meant that some incidents – such as livestock presence in

nominally prohibited areas – could not be followed up. These saw the sharpest increase in Y3. In contrast, a discrete partnership with the CMM to enforce sand extraction regulations had a substantial impact and the presence of sand lorries in the MPA fell steadily and halved from Y1 to Y3. Annex 7 provides a detailed breakdown of these figures and summary of effort.

Overall, this is a complicated output containing both failures and successes. These have been valuable targets, ensuring the conservation purpose of the MPAs remained a central focus of this project. However, over the short period of this project it is hard to prove any causal link between project activities and species indicators. And the necessary evolution of the patrolling system makes the link between records of illegal activities, and the level of threat to species and habitats, a loose one. While much of the output has been met, in hindsight these risks should have been included in the original assumptions and indicators.

### **Output 3: 80% of the population of Maio and relevant decision makers have information about MPA regulations, benefits and opportunities**

This output has two components – public awareness of the MPAs and official approval of MPA regulations. The first has been met, but the second is still ongoing. Against the indicators, progress has been:

1. *23% annual increase in MPA awareness and compliance with regulations:* Annual public surveys have shown a steady increase in awareness of the MPA (those unaware of the MPA fell from 49% in Y1 to 12% in Y3) and of natural resource regulations (awareness here was 41% in Y1, 58% in Y2 and 82% in Y3). This has been achieved through public meetings, school events and media communication (including a weekly local radio slot and occasional national and international television features). Summary of socioeconomic surveys conducted is in Annex 17.
2. *Maio MPA co-management model recognised by the government:* As noted above, the MPA management plan has not been formally approved by the central government. This includes the co-management model that would allow FMB and community members to enforce MPA-specific regulations. *De facto* co-management has continued despite this barrier: FMB and community monitors work closely with the competent authorities and enforcement agency staff, playing a leading role in managing the MPA in accordance with the drafted and locally agreed co-management plans. Regular joint meetings keep this co-operation on track, and reports of illegal activity by FMB and community monitors are usually followed up by enforcement staff. However, much of this has rested on FMB's initiative and resources. In summary, we consider this output indicator unmet as, although all of the necessary steps have been taken including development of the MPA management plan and co-management model and de-facto co-management is taking place, the approach has not yet been formally recognised by the Government.

### **Output 4: Livelihood diversification enterprises linked to marine ecosystem services and MPAs developed and owned by local women groups**

As shown by the indicators, this output focussed on the development of a homestay programme across Maio. Full detail is available in Annex 8, to complement these quantitative indicators.

1. *'Homestay for visitors' scheme developed and introduced to 50 women-headed households in eight villages, by Q2Y1:* 110 women from 13 villages were introduced to the homestay programme in October 2014, and 93 women expressed an interest in trialling the scheme.
2. *20 women-headed households trial homestay ventures by the end of Y1:* 33 houses were trialled, across all 13 villages, in February and March 2015.
3. *30% annual increase in participation, from baseline of 8 in the year before the project:* Eight homes hosted visitors in the year before the project, 11 in Y1 (a 37% increase), 17 in Y2 (54% increase on Y1) and 25 in Y3 (47% increase on Y2). The Y3 figure is a 212%

increase above the Y0 baseline, and we expect participation to continue to increase beyond the end of the Darwin Initiative grant.

4. *Three women formalise businesses by the end of Y3:* Three women were supported to formalise their business in Y3, and this process was complete by the end of the project year.

In summary, this was an extremely popular element of the project and there was no difficulty attracting interested hosts or guests. As shown in Annex 8 the majority of guests were interested in the MPA professionally or as tourists. Samples of promotional materials produced to raise awareness are in annex 19.

### **Output 5: Tailored income savings scheme developed and being adopted by local fishing community members**

This output has proven difficult. While the majority of output indicators have been met, the overall outcome and impact has been less than expected.

1. *Savings programme tailored to fisher community developed in collaboration with local bank by Q3Y1:* A new savings scheme offered by the Cape Verdean NGO 'Morabi' was promoted from Q3Y1, following analysis of all Cape Verdean banks and savings schemes. Morabi's 'Totocaixa Morabi' savings scheme was chosen as being suitable and tailored to the needs of fishers. In February 2015, a 2 year collaboration agreement was signed between FMB and Morabi to further develop the delivery and evaluation of the savings scheme on Maio.
2. *Savings scheme introduced, and training delivered, to fishers in eight villages by Q1Y2:* Totocaixa Morabi was introduced to fishers in ten villages in Q4Y1 through short (20-30 minutes) presentations. Training (40-80 minutes/village) was also delivered in eight villages during Q1Y2 – these training sessions were well-attended, with 93 people taking part. More detailed (20hr) savings and business management training was also delivered to 7 fishermen and 3 fisherwomen in Q1Y2. Detailed savings training was also provided later in Y2 (15hr co-operative management training) and in Y3 (30hr homestay management training). Sample materials used for promotion of the totocaixa scheme in annex 20.
3. *10% annual increase in fisher participation in savings scheme:* Uptake of the savings scheme has been disappointing: 3 participants in Y1, 6 in Y2 and 26 in Y3. While this is a 10% annual increase, we have been disappointed with the take up of saving schemes and thus progress on this indicator.
4. *Participants deposit ≥5% of income into savings accounts, monthly from Q2Y2:* Participants deposited a mean of 3,600CVE/month in Y1, 4,100CVE/month in Y2 and 3,962 CVE/month] in Y3. Morabi did not collect overall income data for savers, but these figures are >5% of all but the very highest monthly incomes in Maio given a mean monthly household income of 15,711 CVE so we are confident this indicator has been met.

### **3.2 Outcome**

This project's intended Outcome was '*To improve state of marine biodiversity, flow of ecosystem services and enhance wellbeing of eight coastal communities in Maio through diversification of livelihoods and participatory management of Marine Protected Areas.*'

This outcome statement has been broadly met. However, we have been disappointed by lack of progress in some areas – in particular the failure of central government to approve MPA management plans, and low uptake of the savings scheme – and this has meant that some improvements are less substantial than we had hoped. However marine biodiversity and its contribution to Maio's wellbeing have shown strong/significant/meaningful improvements, and this project has delivered concrete improvements to income through a successful and popular homestay programme.



This broad picture – and the specific areas that remain unachieved within the project term – can be seen through the outcome indicators summarised below:

1. *MPA under effective participatory management increased to ≥50% of designated areas, and indicator species/ habitats showing an average 20% annual increase in ≥3 MPAs*

The on-the-ground aspects of this indicator have been successful. Biodiversity monitoring undertaken through this project shows a >20% *pa* increase in three of four of the indicator species that were agreed with the Cape Verdean government. All four of the island's marine PAs (collectively) are regularly patrolled by a combination of FMB and government staff, volunteers and lightly-incentivised fishers. The section above on Output 2, Indicator 2 provides more detail, as does Annex 7, which summarises patrol logbooks.

However, the failure to have the MPA regulations approved means that the MPA has less formal management than we would wish. The MPAs have been gazetted, and so more stringent development and activity regulations are in place, but the more specific restrictions agreed with the local government and residents have not been enacted. This includes the formal co-management regime that would allow non-government patrollers to enforce national laws and regulations.

Approval for the regulations has been held up at the government level. FMB have held regular meetings with the central Environment Ministry, at permanent-secretary level, and the Ministry in turn have presented the MPA for approval twice. We have concerns that the delay is due to the prospect of aquaculture or tourism construction within the MPA system – both have been proposed by developers. We do not consider either to be financially viable at the moment and commissioned industry experts to review the feasibility of the aquaculture proposal. This and the failure of a recent large-scale tourism development have been the core of advocacy to Maio's representatives in the National Assembly and to visiting Ministers. Unfortunately this has not yet been successful.

Alongside this advocacy effort, we developed a workable *de facto* co-management system: with regular meetings held between FMB and all agencies with enforcement powers, and an agreement that ensures that breaches documented by FMB will be followed-up by government staff. But this situation is not ideal and makes the long-term effective management of the MPA less certain.

2. *MPA management and FMB staff have the skills needed to continue participatory management of Maio's MPAs*

One of the major impacts of this project has been the development and consolidation of FMB as an effective and financially secure organisation. FMB now have the internal policies, staff, governance and management structures and skills to secure major grants in their own right, and the capacity and local political clout to continue leading MPA management.

Training events scheduled during the three year project period have included English lessons, engaging with tourists, cetacean rescue in the event of stranding, the biology and conservation of sea turtles, sharks and birds, identification skills for target species, and basic training in Microsoft Office and ArcGIS and Google Earth (detailed in Annex 12). All these events have significantly increased the capacity of the 6 permanent environmental monitors responsible for patrolling Maio's MPAs

In addition training has been invested into government staff, and a CMM led application to GEF would secure government investment into PA management, including shifting the permanent PA rangers onto government contracts thus securing management and patrolling in the medium term.

The development of the Guardians of the Sea programme to empower and directly involve local fishermen to protect their own fishing grounds by monitoring and reporting

illegal activities occurring at sea has created a largely sustainable way of maintaining at sea patrolling of the MPAs (See Annex 13 for further detail). The establishment of the Joint Enforcement Patrolling Group (JEPG), a collaborative initiative involving all local stakeholders will be another key tool to continue the participatory monitoring of Maio's MPAs (Annex 13 contains full details on this)

3. *Homestays piloted with ≥50 primarily female-headed households, with ≥25 receiving paying guests and ≥12 receiving 50% of Maio's mean household income.*

93 households have been involved in the homestay scheme, with 25 receiving paying guests and 12 receiving ≥38,500CVE in Y3. Ten households received ≥60,000CVE, which is 30% of the mean, self-reported, household income (more detail in annex 8, and a business plan for future developments is in annex 15).

4. *Income savings scheme trialled and adopted by 150 fishermen and 100 fisherwomen*

As noted in the output section the savings scheme has fallen short of expectations, and this outcome indicator has been missed. Only three fishermen enrolled in the scheme and unfortunately they have not made regular deposits so there has been significantly lower than expected adoption of the scheme. The full break-down of the financial operation of the scheme is presented in Annex 9 and an additional review of the Maio savings scheme in relation to other case studies from FFI and other projects globally is presented in Annex 10.

Attempting to address this, we followed up the initial promotion and training with a door-to-door campaign in Y3 (July, August and September 2016). FMB and Morabi staff spoke to residents of 708 of Maio's 2273 households, including a detailed run-through of the savings scheme and survey of attitudes to savings and to this particular scheme. This saw an additional 26 people (including 3 fishers) join the scheme, and the reasons given by those who were not interested are presented in the Appendix.

The scheme's low uptake appears to have a combination of reasons: fishers do not always have funds to save, and those who do have often joined informal 'savings' clubs – in which a group of savers each contribute to a monthly pot, which is taken in full each month by a different member of the club (i.e. a non-interest-paying way of making sure capital is available at a given point, similar to Christmas savings schemes in the UK). The ability to access funds immediately, without needing to travel to a bank/cashpoint, was strongly favoured by many respondents. Unfortunately, none of these problems could be addressed by promoting a separate bank or NGO savings scheme – all would have faced the same barriers. The Cape Verdean organisations in this partnership did not have the capacity or organisational remit/priority to develop a community-based savings scheme that might have been preferred by fishers.

### **3.3 Impact: achievement of positive impact on biodiversity and poverty alleviation**

This project's intended impact was *'to improve resilience of marine ecosystems through sustainable management of marine resources, for the benefit of threatened species and habitats and enhancement of coastal livelihoods in Maio.*

Considerable progress has been made towards this project impact illustrated by the fact that by Y3, all the marine protected areas of Maio were being regularly patrolled and monitored (outcome indicators 1 and 2). Evidence of progress towards sustainable management of marine resources is seen by the observed 20% reduction in a suite of damaging activities within PAs, and a 50% increase in public awareness of PA requirements (output 3). Critical baseline data were collected on identified key species which will allow future tracking of ecosystem resilience and recovery (annexes 14 and 18).

In addition progress towards Outcome Indicator 3 indicates a noteworthy enhancement of the coastal livelihoods on Maio through the development of the successful homestay programme. By

year 3 more than 10,000 EUR of additional income was generated by the program for 25 local families directly involved.

## 4 Contribution to Darwin Initiative Programme Objectives

### 4.1 Contribution to Global Goals for Sustainable Development (SDGs)

This project's contribution to the SDGs is summarised briefly here, with fuller detail provided in the relevant sections above:

- Goal 1.5: *Build resilience to poverty and climate-related events*: This project has helped diversify incomes and to some extent increase the capacity to save, away from subsistence activities susceptible to Maio's intensifying droughts.
- Goals 4.4, 4.7: *Education for employment and sustainable development*: Substantial training has been provided under this project, providing targeted skills for sustainable development.
- Goal 5.5: *Full and effective participation for women*: The project has provided a range of employment opportunities and development training – and senior staff posts – for women on Maio.
- Goal 8.3, 8.6: *Employment for youth and formalisation of SMEs*: The capacity development provided by this project has allowed FMB to become one of Maio's largest employers, directly providing youth-focussed employment for 1% of Maio's population. Homestays developed and formalised and through this project are sustainable SMEs.
- Goal 14: *Conserve and sustainably use the oceans*: We have substantially contributed to all of these goals, save 14.3 and 14.6, providing local communities with the capacity to run Cape Verde's first MPAs for their sustainable benefit.
- Goals 15.7, 15.c: *Urgent action to end poaching*: Turtle patrols associated with this project have reduced poaching mortality from 42% to 6% of nesting females.
- Goal 17.9: *Capacity building*: Through this project, FMB have developed from a small and newly-formed NGO into an effective participant in Maio's civil society, and are financially secure beyond the life of the Darwin grant.

### 4.2 Project support to the Conventions or Treaties (CBD, CMS, CITES, Nagoya Protocol, ITPGRFA)

The project has contributed to the CBD, CMS and CITES goals as follows:

- The Convention on Biological Diversity (CBD), where it is directly relevant to Aichi targets 1, 4, 6, 7, 10, 11, 12, 14, 17 and 19. Of these the most substantial and lasting contributions are likely to be to targets 1 (increasing awareness of biodiversity values), 6 (the sustainable management of aquatic resources), 11 (the protection of key areas) and 17 (the implementation of participatory biodiversity plans).
- Convention on the Conservation of Migratory Species of Wild Animals (CMS): Cape Verde is a signatory to the Convention, and Maio's waters and shores hold a number of listed species. This project has provided a framework and effective management for protection of these listed shark (*Cetorhinus maximus*, *Rhincodon typus*, *Isurus paucus* and *Lamna nasus*), cetacean (*Sousa teuszii*, *Megaptera novaeangliae* and *Balaenoptera musculus*) and turtle (*Chelonia mydas* and *Caretta caretta*) species as well as unlisted migratory species and indirect support for FMBs work on listed bird species.
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): marine species across Cape Verde, particularly sharks, are threatened by catch for international trade. By improving protection and protected area management, and involving fishers and coastal communities in both, this project has contributed to the survival of migratory species in Cape Verdean waters. Examples include pledges from 48 fishers on Maio no longer to target shark species.

### 4.3 Project support to poverty alleviation

This project is contributing to three Millennium Development Goals and Targets (MDG, 2013) as indicated in the original proposal. By targeting female headed households with the homestay development plans we are addressing two of the main root causes of poverty in Cape Verde, unemployment and under-employment. Uptake and levels of interest in the homestay programme as a livelihood diversification scheme has been very high, with 74 households hosting trial homestay guests and 25 taking paying guests. The homestay scheme continues to empower local women from rural areas to acquire new skills and increase their ability to support their families by generating additional income from new revenue sources. This community-based venture is directly linked to the promotion of the Maio MPA network as a tourist destination to increase visitor numbers to the island and provide them with places to stay and activities to do. With 50% of the population of Maio under 25 there is a clear need to provide opportunities for young people. This project has created learning opportunities for local youths through community outreach activities and employment prospects have been created through the local recruitment of 4 PA monitors. In addition training has been provided in basic eco-guiding techniques to empower local people to take more pride in their communities and become aware of the points of interest to visiting national and international tourists.

Understanding that poverty alleviation and MPA management effectiveness are intimately linked the project has sought to improve the management of the newly designated MPA zoning. Meetings have been held in each of the 13 villages on Maio allowing us to introduce the concept of protected areas and threatened marine species (with the special focus on sharks) to the general public as well as fishers and fish sellers. We have generated the first in-water baseline data for abundance of key indicator species both in and outside MPAs, and are developing close relationships with local fisheries association to further develop a database of current fishery productivity. At least 129 fishers have now been trained in participative techniques to generate a database of megafauna sightings and the project has recorded 281 public sightings of marine megafauna species such as sharks, dolphins, whales, sea turtles. Given the generally low levels of literacy on the island new methods and initiatives are introduced slowly, one new idea at a time to ensure clarity and reduce possible errors in the data being recorded. It is currently too early to assess positive changes in fish catches as a result of MPAs, but fishers are currently positive about the MPAs and the end-of-project survey shows 87% of Maio's residents believe the protection of marine resources through the MPA network will improve living conditions.

### 4.4 Gender equality

Output 4 of this project, the creation of a viable and lucrative homestays scheme, was designed to provide direct and long-lasting financial and social benefits to women and women-headed households on Maio. To date 74 households have hosted pilot visits, 25 have taken paying guests and 3 have been guided through the process of formalising their business: the remainder have been (and will continue to be) supported indirectly through extensive training, business plans and templates, work to develop a sustainable tourism market on Maio and the creation of a network of interested women.

This was a core component of the project, designed specifically to benefit women and with appropriate M&E to capture impacts. To a lesser extent, the same was true of the savings scheme (Output 5), which was designed to benefit both sexes equally but underperformed against its outcome indicator. Less consideration was given to achieving and monitoring gender equality through the other outputs, and it is entirely possible that opportunities to improve equality through these activities were missed.

### 4.5 Programme indicators

- **Did the project lead to greater representation of local poor people in management structures of biodiversity?**

As noted above, the formal management structures for biodiversity have not changed. However, local people have had a greater role in biodiversity monitoring as a result of this project, and this integration of biodiversity understanding at a local level has boosted local support for and interest in biodiversity. When the co-management structure currently sitting with the government is

approved this will formalise the involvement of local people in management and allow them greater representation through the co-management committee.

- **Were any management plans for biodiversity developed?**

An overall MPA management plan was completed, locally agreed and submitted to central government in Y1 (having been substantially developed before the start of the project). An MPA monitoring plan was completed and agreed in Y2-Y3.

- **Were these formally accepted?**

As noted above, the MPA management plan has not been formally accepted. The MPA monitoring plan has been approved.

- **Were they participatory in nature or were they ‘top-down’? How well represented are the local poor including women, in any proposed management structures?**

The unapproved management plan was developed in a participatory way – with extensive consultation in all of Maio’s villages. Management structures would include women and representatives from all villages and sectors.

- **Were there any positive gains in household (HH) income as a result of this project?**

Yes – see below.

- **How many HHs saw an increase in their HH income?**

25 households saw a direct increase in their income, excluding those who benefitted from wages provided by this project and its leveraged income. We have not attempted to measure the benefits provided by project training or procurement.

- **How much did their HH income increase (e.g. x% above baseline, x% above national average)? How was this measured?**

Income was measured directly by FMB, who acted as the agents for homestay businesses. The mean increase across the three years was CVE53,250 pa, which equates 26.55% of mean annual self-reported household income as measured through socioeconomic surveys in 2017. We note that despite frequent approaches and requests for information the National Institute of Statistics has not been able to provide us with the national average household income for comparison.

#### **4.6 Transfer of knowledge**

The project has developed several initiatives that have been adopted or their adoption is being studied. To mention some key ones: (i) the Guardians of the Sea scheme is being proposed on Sal Island by Project Biodiversity (a national NGO); (ii) The Joint Enforcement Group concept has been selected as a recommendation by the National Sea Turtle Protection Network as a collaborative solution for environmental patrolling and enforcement across all the islands in the archipelago; (iii) The MPA Monitoring Plan, and in particular its marine ecology components, has been discussed for adoption and roll out on other eastern islands PAs, and the implementation of the plan as a field course for students of Marine Biology at UniCV.

Over the course of the project 4 students achieved a BSc degree, and 1 student received a MSc degree through research work or internships done within the project, and an additional 4 students are pending submission or approval of internship or research work within the project for the achievement of 2 BSc and 2 MSc degrees. Of these 6 students were from Cape Verde, 2 from the UK and 1 from Portugal and 5 were women and 4 men. Further detail on the scope of the projects is included in Annex 11.

#### **4.7 Capacity building**

Over the course of this project additional staff have been recruited to FMB, and many of them have directly benefited from the training and capacity building element of this proposal. Of note are two staff members who have seen considerable professional development and growth during

the project period. **Adilson dos Passos** (male, from Santiago, CV), became Head of the Turtle Conservation Program at FMB in late 2015, and in 2016 was appointed as one of the three representatives of the National Sea Turtle Protection Network, representing it in front of the Environment Minister, Members of Parliament and at the International Sea Turtle Society Symposium in Las Vegas (US). **Janete Agues** (female, from Maio, CV), went from being an intern at FMB in 2013 before the project to a full officer in the Sustainable Development Program by 2015, and since 2016 she has worked as the Ecotourism and Community Development Officer. She was invited to integrate the educational council of Maio.

## 5 Sustainability and Legacy

The key achievements of this project have been financially secured beyond the life of the Darwin Initiative grant. €630,000 of funding has been received for 2017-2020, and the same amount provisionally offered for 2020-2022, from the MAVA foundation for a programme of work that consolidates and develops the Darwin activities. In particular this work will formalise and support marketing for additional homestays, and provide for expanded MPA patrols alongside a €30,000/yr grant from the Global Environment Facility to the Cape Verdean government, which will cover core ranger patrolling.

While the MPA regulations have not been formally approved, the working relationships that underpin the MPA's *de facto* management are secure and broad – based on regular contact between a range of staff in several institutions, and not on personal relationships. We expect these to endure and develop: an example agreed after the end of project funding is a licensing system for sand extraction operators, involving a code of conduct and vehicle registration.

Project equipment will remain in-country, managed by FMB unless formally adopted by the government together with ranger staff and responsibilities. All project staff will remain employed by FMB (again, unless adopted by the government) with work programmes and Terms of Reference that align with the outcome statement of the Darwin Initiative project.

We have been disappointed by the lack of formal agreement of the MPA regulations within the project term, and to use these to influence national processes. FFI and FMB will continue our advocacy to formalise MPA management, and build on the links made with NGOs on other islands.

## 6 Lessons learned

The key lessons we have learned through this project are:

- The importance of advocacy to the central government: despite a close and positive relationship with the municipality and local representatives of central government, frequent meetings with central government and a presentation at the National Assembly, the MPA management plan is still waiting on government approval. While this was identified as a risk in the project assumptions, a lesson for future projects is to identify partners with enough political/advocacy experience to overcome central barriers of this sort.
- Staff turnover on the project has been high. This has not affected the activities or the majority of the output indicators, but much effort has gone toward stabilising FMB and thus the project's delivery. A clear management structure and delegations of responsibility at FMB stopped many of these problems once it was put in place at the end of Y2.
- Community engagement in homestays and participatory monitoring has been very enthusiastic and has far exceeded our expectations – considerable planning has gone into making sure that this engagement was treated fairly and transparently, and that women who were not fully supported to formalise homestay business still benefited from the programme as they were involved in all elements of the programme up until the point of obtaining a formal licence from the government to run a homestay (please see Annex 8 for further details). This flexibility and the ability to deal with unexpectedly high interest in a project activity is an important lesson for future projects.
- The failure of the savings scheme to attract sufficient savers has shown the importance of being able to design and adapt the proposed savings framework as early as possible

in the project. In contrast to the homestay project, we were unable to develop a suitable locally-led alternative to the Morabi savings scheme, and Morabi were not able to adapt their product to provide something suitable for the local conditions on Maio. This is examined in more detail in Annexes 9 and 10.

- The majority of the biodiversity outputs were met during this project, and we developed key strategies to implement baseline and regular monitoring. The approaches implemented demonstrated positive impacts on species numbers, however, realistically the project term was too short to demonstrate scientifically robust changes in species numbers and further years of data are needed to allow statistically reliable analyses.
- Lastly, this project has provided the time and resources to develop FMB as a sustainable and prominent NGO on Maio. Setting aside time, funding and resources to improve the capacity of FMB staff and its institutional management has been critical to its current promising situation.

## **6.1 Monitoring and evaluation**

Two changes were formally approved in Y3: adjustments to the budget, and to Outcome Indicator 3 which was previously over-ambitious (duplicating the Output indicators but with higher targets).

The M&E system did prove helpful – including the twice-yearly requirement to report to the Darwin Initiative, which provided a good framework to review progress and expert advice from the annual reviewers. Data from the annual socio-economic surveys was helpful in guiding outreach to address gaps in knowledge and reasons for people not engaging with project activities. Ecological M&E is still at an early stage, and this project has served more to establish robust monitoring than to apply it to adapt activities – however the ecological data have been used to target follow-up work funded by the MAVA Foundation, US Fish and Wildlife Service and Global Environment Facility. The most immediately effective M&E was provided by patrol data – patrol schedules and routes were reviewed in Y3 on the basis of recorded events, and weekly review meetings allow patrollers and FMB management to react to new events. The clearest example of this was the rapid reaction to construction on a Ramsar wetland within the MPA network, where early warning from patrol staff allowed FMB to halt construction and negotiate a relocation of the building work to a less sensitive location.

## **6.2 Actions taken in response to annual report reviews**

Annual report reviews have been shared with partners, and also fed into FFI internal reviews to improve performance on other Darwin Initiative projects.

The main comments made by reviewers were (i) that the indicators and targets for the grant should be reviewed and (ii) that reporting (especially of outputs) should be clearer and concentrate on impact rather than activities. We have attempted to address the latter problem in this final report. All indicators and targets were reviewed by FFI and FMB following the review of the Year 2 report, and a change request was submitted and approved by Darwin in January 2017 to amend the targets to make them more realistic.

## **7 Darwin identity**

The Darwin Initiative logo and identity have been widely publicised within Maio: the logo is visible on the signposts marking entry to the MPAs, on information boards about the species, features and activities available within the MPAs, and on >1000 t-shirts supplied to engaged community-members. The t-shirts in particular are highly prized and worn throughout the island.

All public project activities have included up-front reference to the Darwin Initiative and the UK government, and the end-of-project dissemination events were framed as a summary of what UK funding has allowed people on Maio to do. We have not surveyed understanding of the Darwin Initiative, but we expect a large proportion of Maio's residents, and most people who have engaged with the project, are aware of the UK's involvement.

The Darwin Initiative has also been clearly signposted as a funder to the Cape Verdean civil service in meetings and reports: the municipal government, and the central government departments and their delegates have all been informed of the connection.

Our project has had other funders, and these have also been recognised alongside the Darwin Initiative. We would expect most residents and decision-makers to be uncertain about the precise 'boundary' between Darwin-funded and co-funded/leveraged activities, but to have a clear understanding that the Darwin Initiative has been the core funder of FMB activities and that the homestay project and MPA capacity-building in particular are 'Darwin' programmes.

## 8 Finance and administration

### 8.1 Project expenditure

Expenditure under this project in the latest financial year is presented in the tables below, and the audit report from requested audit is included in the supplementary materials.

A budget change was approved by the Darwin Initiative for this financial year, allowing the following changes to the Partner Organisation budget:

1. A transfer of £2621 (16.1% of Y3 budget) from the Operating Cost budget, with:
  - £1910 (11.7% of source budget; 8.3% of destination) moved to the Staff budget, for the payment of MPA monitors once they were judged fully-trained staff.
  - £710 (4.4% of source, 84.5% of destination) moved to the Capital Equipment budget for additional monitoring and ranger equipment. Note this addition was not fully spent as funding from another grant eventually covered some of this equipment.
2. A transfer of £1750 within the Operating Cost budget: from the livelihood sustainability sub-category to the livelihood diversification sub-category.
3. Reallocation of funds within the Staff budget to reflect changing wages at FMB, to best use an unspent Y2 transfer and to create new roles for the last phase of the project, specifically:
  - The recruitment of a Sociologist and Marine Technical Assistant
  - Lowered wages for newly hired Ecotourism and Marine Programme Leader roles
  - Increased wage for the Marine Assistant.

There was no change to the overall size of the Partner Organisation budget, nor any change to the Lead Organisation budget.

<b>Project spend (indicative) since last annual report</b>	<b>2016/17 Grant (£)</b>	<b>2016/17 Total actual Darwin Costs (£)</b>	<b>Variance %</b>	<b>Comments (please explain significant variances)</b>
Staff costs (see below)			-1%	
Consultancy costs			+8%	
Overhead Costs			0%	
Travel and subsistence			-5%	
Operating Costs			-3%	
Capital items (see below)			-38%	Equipment budget from parallel project covered all necessary capital items.
Others (see below)			+3%	
<b>TOTAL</b>	<b>79,664</b>	<b>78,650.80</b>		



<b>Staff employed (Name and position)</b>	<b>Cost (£)</b>
Jack Rhodes, Project Leader – FFI	
Paul Hotham, Regional Director - FFI	
Helen Anthem, Livelihoods & Governance Officer – FFI	
Rebecca Plant, Programme Finance Officer – FFI	
Cristina Maese-Perez, Finance Business Partner – FFI	
Arnau Teixidor Costa, Director – FMB	
Nelyto Reis, Sociologist – FMB	
Janete Agues, Eco-tourism and Development Officer – FMB	
Sara Ratao, Marine Programme Manager - FMB	
Alcino Araujo, Finance and Admin Manager – FMB	
Nivaldo Ramos, Marine and Community Assistant – FMB	
Euclides Lopes, Office Guard – FMB	
Adilson Ramos, Marine Technical Assistant	
Isidoro Cardoso, MPA monitoring Coordinator	
Carlos Andrade & Joao Reis - MPA Monitoring Officers x2	
<b>TOTAL</b>	<b>39,633.62</b>

<b>Capital items – description</b>	<b>Capital items – cost (£)</b>
MPA ranger equipment (PPE)	
Biodiversity monitoring equipment and software (Diving equipment)	
Training materials (books, maps, ID guides)	
<b>TOTAL</b>	<b>961.64</b>

<b>Other items – description</b>	<b>Other items – cost (£)</b>
Car/boat fuel and rent	
Stationery – FMB	
<b>TOTAL</b>	<b>5,612.08</b>

## 8.2 Additional funds or in-kind contributions secured

Source of funding for project lifetime	Total (£)
FFEM	
Conservation Leadership Programme	
Global Environment Facility Small Grants	
NOAA	
Save our Species, IUCN	
Arcadia	
Sea Bird Group	
MAVA Foundation	
RAMPAO Small Grants	
Fondation Ensemble	
Earthwatch Institute	
Rufford Foundation	
Municipality of Maio (CMM)	
National Directorate of the Environment (DNA)	
FMB in kind	
FFI in kind	
<b>TOTAL</b>	<b>226,151</b>

Source of funding for additional work after project lifetime	Total (£)
MAVA Foundation (May 2017-2020)	
Arcadia (until December 2017)	
USFWS MCTF (2017-2020)	
<b>TOTAL</b>	<b>697,300</b>

## 8.3 Value for Money

Throughout the course of this project from the original budget design to the actual implementation costs have been based on our experience of working in Cape Verde since 2012.

A significant portion of the budget was allocated to staff costs, but with the exception of the Director and Marine Programme Manager all staff employed through FMB on Maio were local staff. Supporting significant capacity building of these staff members over the life of the project, has resulted in a substantial boost to the capacity of FMB, and provided much better value for money and sustainability of the project than short-term overseas experts. As a result of the investment during the Darwin project the FMB team on Maio are better equipped to deliver conservation activities and capable of securing and managing further large scale funds from international donors.

Oversight by the Project Leader, the Finance Officer and a Regional Director with extensive experience of Darwin grants, as well as the guidance of existing FFI financial and operational policies, helped to ensure that money was used effectively, transparently and efficiently throughout project delivery.

Throughout the project we have endeavoured to develop participatory solutions to MPA monitoring and patrolling (such as the Guardians of the Sea and the Joint Enforcement Patrolling Group) which provides low cost, more sustainable options to maintain activities over the longer term.

# Annex 1 Project's original (or most recently approved) logframe, including indicators, means of verification and assumptions.

Note: Insert your full logframe. If your logframe was changed since your Stage 2 application and was approved by a Change Request the newest approved version should be inserted here, otherwise insert the Stage 2 logframe.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p><b>Impact:</b></p> <p>Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.</p>			
<p><b>Outcome:</b></p> <p><b>To improve state of marine biodiversity, flow of ecosystem services and enhance wellbeing of eight coastal communities in Maio through diversification of livelihoods and participatory management of Marine Protected Areas.</b></p>	<p><b>Indicator 1</b></p> <p>Marine protected area under effective participatory management increased from 0% (current baseline area) to at least 50% of designated areas and the indicator species and habitats show an average increase of 20% from the baseline in at least 3 MPAs by the end of the project.</p> <p><b>Indicator 2</b></p> <p>By the end of year 3, local MPA management body and FMB staff has a set of skills to continue applying participatory approach for biodiversity monitoring, enforcement, awareness raising and fundraising for the network of MPAs in Maio.</p> <p><b>Indicator 3</b></p> <p>By year 3, community business opportunity (homestays) piloted with at least 50 primarily female-headed households, with at least 25 receiving paying guests and at least 12 receiving 50% of the Maio's mean household income from hosting guests.</p> <p><b>Indicator 4</b></p>	<p><b>Indicator 1</b></p> <p>Approval of the participatory MPA management plan and composition of co-management committee by DGA; number of MPAs under regular surveillance; MPA patrol logbooks; biodiversity monitoring data; technical reports; records of feedback from local stakeholders involved in the project; records of feedback from community members; MPA effectiveness evaluation reports.</p> <p><b>Indicator 2</b></p> <p>Approval of the participatory MPA management plan and composition of co-management committee by DGA; minutes of committee meetings; records of co-management activities delivered; training materials and sessions; updates on FFI/FMB/Darwin Initiative websites and media releases; co-management agreement for our local partner FMB; co-management team capacity assessment records; portfolio of financing strategies</p> <p><b>Indicator 3</b></p> <p>Business plan for the livelihood diversification project; links with micro-credits providers; annual socio-</p>	<p><b>Assumption 1</b></p> <p>Political situation and local government in Maio will not significantly change their development objectives during the implementation of the project</p> <p><b>Assumption 2</b></p> <p>The management plans for five MPAs in Maio are approved by the government</p> <p><b>Assumption 3</b></p> <p>Target local community groups remain willing to explore and engage in livelihood diversification and enhancement activities</p> <p><b>Assumption 4</b></p> <p>Main stakeholders in Maio will continue to collaborate in participatory MPA management process.</p> <p><b>Assumption 5</b></p> <p>In country partners remain willing to learn and be actively involved in the implementation of the project</p>

	Income savings scheme trialled and adopted by 150 fishermen and 100 fisherwomen by the end of the project.	economic surveys on the progress and income data from sampled households; number of families involved; number of indirect beneficiaries; local homestay business group established (by the end of year 3)  <b>Indicator 4</b>  Meetings with local bank; tailored workshops and information package for local fishers; number of participants; number of savings agreements signed; increase in savings from the baseline.	
<b>Outputs:</b>  1. Capacity of FMB, co-management team and community members built to implement co-management model for the network of MPAs in Maio	1a. Technical capacity, training needs of FMB and MPA co-management team, and gaps in community conservation capacity assessed and training programmes finalised by the end of Q3 year 1  1b. Training programmes delivered by Q2 year 2 and trainee skills for the co-management of MPAs assessed and evaluated annually  1c. Guidelines for effective co-management of MPA network tailored to small island communities in developing countries developed during years 1 and 2, and finalised by the end of year 3	Workshops delivered, numbers of participants trained, capacity assessment scores, co-management agreement between FMB and DGA as acknowledgement of FMB's capacity to deliver co-management functions; training materials produced	<b>Assumption 1:</b> DGA will approve MPA co-management structure and roles of main stakeholders by the end of Q2 2014
2. Participatory biodiversity monitoring and enforcement system in place in at least three MPAs in Maio	2a. MPA monitors record and report 7% annual increase in commercial and non-commercial indicator species in the surveyed areas in the network of MPAs. The baseline will be established at the start of the project in NTZs, MPA artisanal fishing zones and control sites outside MPAs  2b. Community rangers daily patrol Maio MPA network and 20% annual reduction of illegal activities is recorded	Number of MPAs under regular surveillance; MPA patrol logbooks; biodiversity monitoring surveys and databases; technical reports; MPA effectiveness evaluation reports; portfolio of financing strategies; updates on FFI/FMB/Darwin Initiative websites and media releases and other activities as outlined in section 21.	

	from the baseline established at the start of the project.		
<b>3.</b> 80% of the population of Maio and relevant decision makers have information about MPA regulations, benefits and opportunities	<p>3a. Annual increase of 23% in a number of Maio community members aware of MPAs and adopting MPA regulations recorded in eight coastal villages.</p> <p>3b. By the end of year 3, Maio MPA co-management model is recognised by the government as a successful marine resource management example for replication in other Cape Verdean PAs</p>	Number of community awareness assessment surveys; records of feedback from community members; interviews to the community radio in Maio; news on the national TV; meetings with the government; external publications on Maio MPA progress and results; government documents and press releases;	<b>Assumption 2:</b> Community members will participate in MPA co-management processes and be willing to learn new skills through training
<b>4.</b> Livelihood diversification enterprises linked to marine ecosystem services and MPAs developed and owned by local women groups	<p>4a. The 'homestay for visitors' scheme developed and at least 50 women-headed households in eight coastal villages introduced to the plan and opportunities by the end Q2 of year 1</p> <p>4b. At least 20 women-headed households start trialling homestay venture by the end of Q4 year 1</p> <p>4c. Annual increase of 30% in the participation of local households in the pilot project is recorded from the pre-project baseline of eight families established in 2013.</p> <p>4d. By Q4 of year 3 local women formalise their status as a small homestay business owners to effectively promote a well structured service for tourists in identified national and international markets.</p>	Meetings and workshops with local women; annual socio-economic surveys, income data, number of sampled households; number of families involved; number of indirect beneficiaries; local homestay business group established (by the end of year 3); project evaluation report; promotion materials produced, homestay business proposal,	<p><b>Assumption 3:</b> The success of the pilot homestays (triated in the pre-project phase) will be sufficient enough to encourage more families, especially women-headed households, to trial a new income diversification venture.</p> <p><b>Assumption 4:</b> Local fisher community will be willing to learn and consider changes to their lifestyle and attitudes</p>
<b>5.</b> Tailored income savings scheme developed and being adopted by local fishing community members	<p>5a. Income savings programme tailored for fisher community developed in collaboration with local bank in Maio by Q3 of year 1</p> <p>5b. Income savings scheme introduced and training delivered to local fisher community in eight coastal villages by Q1 of year 2</p>	Meeting records with local bank; tailored workshops and information package for local fishers; number of participants; number of savings agreements signed; increase in savings from the baseline; scheme evaluation report	

	<p>5c. 10% increase in fisher participation in income savings scheme recorded annually from the baseline of 0%</p> <p>5d. Participants deposit at least 5% of income into the savings account each month starting from Q2 of year 2</p>		
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**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)

Activity 1.1: Assess the current capacity of local and national stakeholders and community members in Maio to deliver co-management activities in the network of MPAs

Activity 1.2: Develop training programme and materials to build capacity in MPA co-management and sustainable development in Maio

Activity 1.3 : Deliver training to MPA co-management team and community members

Activity 1.4: Hold meetings with local stakeholders to discuss project progress and receive their input.

Activity 1.5: Monitor the progress of co-management team, local rangers and community volunteers to deliver activities; organise training refresher sessions if needed

Activity 1.6: Fundraise to secure co-funding to fully deliver project activities for years 2, 3 and in the post-project phase

Activity 1.7: Produce MPA co-management standards and submit to the DGA for approval

Activity 2.1: Develop participatory biodiversity monitoring training programme, protocols and databases and train participants

Activity 2.2: Develop participatory MPA network patrolling scheme, protocols and databases and train participants

Activity 2.3: Procure MPA patrol and biodiversity monitoring equipment

Activity 2.4: Identify effective incentives to encourage voluntary community participation in the MPA network patrols and biodiversity monitoring.

Activity 2.5: Run surveys to establish baselines for biodiversity monitoring in the network of MPAs in Maio

Activity 2.6: Conduct MPA enforcement patrols and biodiversity monitoring in the network of five MPAs in Maio

Activity 2.7: Monitor project progress using relevant indicators and produce project reports

Activity 3.1: Assess the knowledge gaps of all stakeholders in Maio about MPAs

Activity 3.2: Design MPA communication programme to reach diverse stakeholder groups in Maio and nationally

Activity 3.3: Deliver MPA messages to the local population in eight coastal villages in Maio and nationally

Activity 3.4: Communicate regular updates to relevant government institutions, international supporters and funders using MPA communication strategies

Activity 4.1: Prepare the participatory implementation plan for the homestay project

Activity 4.2: Train the participants and help set to up in house structures to deliver the service to visitors

Activity 4.3: Monitor participants' progress and provide assistance in delivering and promoting the service if needed

Activity 4.4: Support local women to organise themselves in a business group to formalise their status and promote their tourism product in national and international market.

Activity 4.5: Record and evaluate both MPA benefits to homestay project (e.g. higher species diversity that attract tourists to Maio) and local participants' contribution to the conservation of biodiversity in the MPAs (e.g. positive change of attitude and behaviour, more awareness)

Activity 4.6: Prepare business plan for the Maio community homestays venture for the post-project phase, involving small-scale business consultants

Activity 5.1: Identify current fisher savings and fish catch baseline

Activity 5.2: Identify income savings schemes relevant to fishers and developed tailored information and training package for fisher community groups, with local bank manager

Activity 5.3: Conduct training workshops and introduce fishers to the savings scheme in at least eight coastal villages in Maio

Activity 5.4: Monitor the progress of the adoption of the income savings scheme and fish catch using relevant indicators

Activity 5.5: Evaluate the effectiveness of income savings scheme as a correlation between the fish catch, total income and fisher savings



## Annex 2 Report of progress and achievements against final project logframe for the life of the project

Project summary	Measurable Indicators	Progress and Achievements
<p><b>Impact:</b></p> <p><b>To improve resilience of marine ecosystems through sustainable management of marine resources, for the benefit of threatened species and habitats and enhancement of coastal livelihoods in Maio</b></p>		<p>By Y3, all marine protected areas of Maio were being regularly patrolled and monitored, the &gt;20% reduction in a suite of damaging activities was not seen but this could be the result of improved data collection in comparison to Y1 and there was an average of 36% increase in public awareness of PA requirements. Most stakeholders have shown interested and made efforts to improve law enforcement and worked together for general enhancement of MPAs, despite the delay in signing off the Management and Monitoring Plans of the Protected Areas of Maio. More community members are more aware of MPAs and their values and have become more participative and interested in conservation and preserving their natural resources. Additionally, this project also empowered several women in starting and maintaining their own business through the Homestay programme.</p>
<p><b>Outcome</b></p> <p><b>To improve state of marine biodiversity, flow of ecosystem services and enhance wellbeing of eight coastal communities in Maio through diversification of livelihoods and participatory management of Marine Protected Areas</b></p>	<ol style="list-style-type: none"> <li>1. Marine protected area under effective participatory management baseline area) to at least 50% of designated areas and the indicator species and habitats show an average increase of 20% from the baseline in at least 3 MPAs by the end of the project.</li> <li>2. By the end of year 3, local MPA management body and FMB staff has a set of skills to continue applying participatory approach for biodiversity monitoring, enforcement, awareness raising and fundraising for the network of MPAs in Maio.</li> <li>3. By year 3, community business opportunity piloted with at least 50 primarily female-headed households with an increase in income of 50% - from the baseline of 15,000 CVE per month to 22,500 CVE in these households.</li> </ol>	<p>Y1:</p> <ol style="list-style-type: none"> <li>1. Participatory monitoring was implemented on a regular basis in the two largest MPAs within the CAPM: PNNM (20km<sup>2</sup> marine part) and Marine Reserve of Casa Velhas (6.6km<sup>2</sup>). Morro and Lagoa Cimidor MPAs were also monitored less regularly.</li> <li>2. Intensive awareness raising and capacity building workshops were implemented in 12 local communities with the participation of principal stakeholders involved in the CAPM co management. International training opportunities were identified and 2 representatives from DNA and one from FMB attended a10 day training event in South Africa.</li> <li>3. Start developing a Business Plan for the CAPM as the result of the international training. Workshops, general meeting, environmental events, radio programmes, brochures and information panels were produced to communicate CAPM to local communities and island visitors. An Action Plan for the implementation of the "homestays" programme was developed and trials were conducted in 12 communities on the island. Income savings schemes have been identified, an agreement with the scheme provider has been signed, and introductory meetings were conducted in 10 communities on the island. National and local government continues to support the co-management structure of the CAPM. The management plan has been approved and is with the Registry Office for publishing in the official "Boletim". Community groups were found to be willing to participate in project</li> </ol>

	<p>4. Income savings scheme trialled and adopted by 150 fishermen and 100 fisherwomen by the end of the project</p>	<p>activities related to livelihood diversification, sustainability and co-management as reflected by high attendance at community trainings and workshops.</p> <p>4. Savings scheme with MORABI to favour people with low income started being developed.</p> <p>Y2:</p> <ol style="list-style-type: none"> <li>1. The structures, public engagement and training for effective participatory management are in place, including regular patrolling of the PNNM and RMCV MPAs (96% of total MPA area) and high community engagement (see section 3 and below). Indicator species and habitats are not showing expected increase.</li> <li>2. Skills assessment and training programme developed in Y1 has been carried out in Y2. Details provided below.</li> <li>3. Piloting has taken place in 74 households by end Y2 with extensive training (82 women attending meetings, 44 training) and a network of 11 village leads established.</li> <li>4. Incomes saving scheme developed in Y1, with 6 members at end of Y2. This is slower progress than expected.</li> </ol> <p>Y3:</p> <ol style="list-style-type: none"> <li>1. All MPAs were regularly patrolled by FMB staff, volunteers or by the Joint Enforcement Group. Indicator species and habitats showed a 6.7% increase of species and habitats.</li> <li>2. Skills assessment and further training continued in Y3.</li> <li>3. 30 women received people in their households and more training continued (25 women attended homestay training which included health and safety, and cooking lessons amongst others and 15 women attended the 2<sup>nd</sup> phase of English classes from February to April 2017). By the end of Y3, 74 families have experienced homestay from which 25 that participated in Y3 have received an average of 43263 CVE per year. Considering the 5 more active months (Jun-Oct), they have received an average of 9995 CVE/month which does not reach the target.</li> <li>4. Totocaixa savings scheme was adopted by 23 people in Y3, making a total of 27 people during the duration of the project and 876000 CVE saved. This aim was not reached due to the lack of saving culture in the country and lack of financial resources.</li> </ol>
<p><b>Output 1. Capacity of FMB, co-management team and community</b></p>	<p>1a. Technical capacity, training needs of FMB and MPA co-management</p>	<p>Y1:</p>

<p><b>members built to implement co-management model for the network of MPAs in Maio</b></p>	<p>team, and gaps in community conservation capacity assessed and training programmes finalised by the end of Q3 year 1</p> <p>1b. Training programmes delivered by Q2 year 2 and trainee skills for the co-management of MPAs assessed and evaluated annually</p> <p>1c. Guidelines for effective co-management of MPA network tailored to small island communities in developing countries developed during years 1 and 2, and finalised by the end of year 3</p>	<p>1a. The co-management team was approved following delays in March 2015. Due to the delays in setting up and official approval of the co-management team. Key training is needed in monitoring of marine biodiversity (diving surveys) and fundraising.</p> <p>1b. Development of the Business Plan for the CAPM was identified as one of the main priorities for 2015. The co-managers (2 from DNA and 1 from FMB) attended a 10 day international training in South Africa in Business planning for PAs. Technical skills and progress of community monitors are being assessed on regular basis (at least once a month) during announced visits in the field by the monitoring coordinator and in the office.</p> <p>1c. Data collection was done.</p> <p>Y2:</p> <p>All indicators remain on track (save three month delay in 1a.) and appropriate:</p> <p>1a. The co-management team was approved in March 2015 and training needs assessed.</p> <p>1b. Extensive training programme delivered throughout Y2, with reassessment due in early Y3 once FMB Marine project leader is in place.</p> <p>1c. Co-management and monitoring guidelines under development and discussion with government. Management plan delayed at central government level but co-management protocols and division of responsibilities largely finalised.</p> <p>Y3:</p> <p>1a. Technical training continued throughout Y3 with community training focused mainly on fishermen that patrol the seas in the Guardians of the Sea Initiative.</p> <p>1b. Reassessment of team skills done and training provided for areas where skills were lacking, including QGIS, Microsoft office, fish and bird identification, underwater visual census, etc.</p> <p>1c. Protected Areas Management Plan still awaiting approval from the Government. Monitoring Plan for the Protected Areas developed during summer of 2016 and draft was sent to stakeholders. The monitoring Plan is also awaiting Government's validation to be finalized and submitted for approval.</p>
<p>Activity 1.1 Assess the current capacity of local and national stakeholders and community members in Maio to deliver co-management activities in the network of MPAs</p>		<p>Y1: The co-management team was approved with the delay in March 2015. The assessment of specific needs and gaps is still in progress. So far key training is needed in monitoring of marine biodiversity (e.g. diving surveys), fundraising, and community knowledge was assessed during the interviews conducted in June-July 2014 in 10 local villages on the island.</p>

	<p>Y2: Co-management team approved with a delay in March 2015. Training needs assessments in Y1 have been monitored and updated, with key needs met through Activities 1.2 and 1.3. Y2 training included conservation monitoring, statistical analysis, SCUBA diving and shark and cetacean release as well as driving and English training.</p> <p>Y3: Further training was done on essential skills such as on excel, word and powerpoint, ArcGIS earth, QGIS, fish and bird identification skills to improve better monitoring of MPAs and office skills of staff. More training was given to FMB staff by marine biologist Rui Freitas from UniCV in water survey techniques (underwater visual census of coastal fish, coral bleaching and disease census, underwater remote video techniques and scientific diving) to ensure people's capacity for adequate data collection, particularly to carry on activities of the Monitoring Plan for the Protected Areas. Additionally, there was also a ArcGIS course run for FMB and partners (10 attendees) and a project management and fundraising course given by Sara Calçada from FFI to relevant FMB members, stakeholders and other institutions (7 course attendees). English classes were carried out throughout Y3 for FMB, partners and homestay ladies. Two FMB staff started two further diving courses in late April 2017 to carry on improving their in water skills.</p> <p>Several meetings between all stakeholders in the island were arranged to create and develop Maio's first Monitoring Plan of the Protected Areas. Participative sea patrols with fishermen started with 12 fishermen actively involved in the marine patrols. The aim of this programme is that fishermen patrol their own fishing grounds and report any illegal activities such as the capture of prohibited species and the use of illegal fishing techniques. There were a total of 8 illegal activities reported until Dec 2016 and 19 since Jan 2017 until end of Mar 2017. Number of fishermen involved increased to 18 by March 2017. Patrolling scheme was refined with monthly schedules and more training through meetings and support from FMB staff whilst on/off trips with GoS. Efforts were done between stakeholders to do regular joint patrols around the island.</p>
<p>Activity 1.2. Develop training programme and materials to build capacity in MPA co-management and sustainable development in Maio</p>	<p>Y1: In October 2014, following the knowledge assessment as per A1.1, meetings were conducted in 13 villages on the island to map training needs of local stakeholders.</p> <p>Y2: Training included conservation monitoring, first-aid, statistical analysis, SCUBA diving and shark and cetacean release as well as driving and English training for co-management team members (see section 3 for further detail). Community training focused in target groups in Y2: 40 young community volunteers, 129 fishers and 44 women in the homestay program were all given targeted training.</p> <p>Y3: More training for monitoring skills was done including improvement of fish and bird identification skills, in water survey techniques, review of data collection,</p>

	improvement of some field data sheets, training in ArcGIS, SCUBA, English and a project management and fundraising course was also carried out.
Activity 1.3. Deliver training to MPA co-management team and community members	<p>Y1: In February-March 2015, trainings were delivered to 12 local communities.</p> <p>Y2: See Y2 Activity 1.2.</p> <p>Y3: Further training on English classes, ArcGIS software and management and fundraising was done in which MPA's co-management team and community members (particularly homestay ladies in English classes) participated.</p>
Activity 1.4. Hold meetings with local stakeholders to discuss project progress and receive their input	<p>Y1: During knowledge assessment and community training discussions were conducted with local stakeholders on the activities delivered so far and the path they should take in coming months. Regular updates via email, personal meetings and phone calls are conducted with the national (DNA) and local government (CMM). UniCV is actively involved in the project activities through the trainings and assistance in development and implementation of biodiversity surveys. In March 2015, DNA/MDR/CMM and FMB organised CAPM presentation and co-management team introduction meeting to main stakeholders on the island including Maritime and National Police, Fisheries Associations from Porto Ingles, Calheta and Barreiro, SDTIBM, local business and general public.</p> <p>Y2: Weekly meetings with municipal government and local government representatives have continued through Y2. Frequent community stakeholder meetings have taken place around specific activities.</p> <p>Y3: Meetings with local stakeholders continued fairly regular throughout Y3. Some of these meetings included ADEI, SDTIBM, CMM, MAA, AMP, ACOPECA, amongst others. Biweekly to monthly meetings were maintained with MAA and emails and calls exchanged several times a week; at least monthly updates with CMM and several informal meetings with fishermen from most communities (via GoS or workshops) were also done; biweekly to monthly email contact with UniCV partners and 2 strategic meetings were held with PRAO (West African Fisheries Program) representatives: 1 in Maio with PRAO's consultant Mr. Rado Ioniariilain in May 2016 to discuss the fisheries co-management plans, their approval and coordination; 1 in Praia with PRAO's project manager Dr. Aníbal Medina in November 2016 focused on the outcomes of phase 1 (finalised in early Y3) and potential timings for the second phase. Additionally, there were occasional meetings (monthly) with ACOPECA and 22 fish inspections to ports (fish inspections from ACOPECA and maritime police (PN)) using FMB's car, several emails exchanged with INDP and some meetings with this institute, and finally weekly contact with DNA Praia. There were 7 meetings with the relevant stakeholders of the Joint Enforcement Patrolling Group (1 February 2016, 2 meetings in October, 2 in November, 1 in February 2017 and 1 in March 2017). Especially relevant was the meeting on February where the responsibilities on developing a patrol plan, data collection, reporting, calling the patrols were defined</p>

	<p>among the seven members. Individual operational meetings with one or several JEG members were held on a regular basis throughout the reporting period. During Y3, emails proved to be not effective as they were often unread thus 9 reporting letters were sent in total: 4 reporting letters were sent to all 6 Joint Enforcement group members: (i) MPA sites identified where sand extraction happens; (ii) Illegal fishing practices in Praia Real from sports fishers and local dragnet fishers; (iii) High rate of turtle poaching; (iv) New sites of illegal sand extraction and driving on beaches. 1 letter on the homestay program progress was sent to all JEG and development partners. 3 letters were sent related to the MPA Monitoring Plan Progress to all partners and stakeholders. 2 letters were sent to the CMM on construction being developed in a PA.</p>
<p>Activity 1.5. Monitor the progress of co-management team, local rangers and community volunteers to deliver activities; organise training refresher sessions if needed</p>	<p>Y1: Technical skills and progress of community monitors were assessed and training priorities given. Skills assessed on regular basis (at least once a month) during announced visits in the field by monitoring coordinator and in the office.</p> <p>Y2: Technical skills and progress of community monitors are being assessed on weekly basis through regular sessions in the FMB office. Community volunteers are visited every month to collect public sightings data sheets and refresh trainings on data collection. Progress of the co-management team is tracked during regular meetings with DNA and CMM. Technical skills and progress of community were assessed on regular basis (also at least once a month).</p> <p>Y3: Several surveys carried out by FMB during Y1-2 were included in the PA Monitoring Plan of Maio and their effort adapted accordingly. Several demo surveys and tests were done in order to train FMB staff in fish ID, fish size and in how to properly perform the new underwater fish census (included in the Monitoring Plan). Bird ID refreshers were done occasionally for both MPA monitors and FMB staff that also carried out MPA patrols.</p>
<p>Activity 1.6. Fundraise to secure co-funding to fully deliver project activities for years 2, 3 and in the post-project phase</p>	<p>Y1: funding was secured for the implementation of project activities between Y1 and Y2.</p> <p>Y2: the focus has been on finalizing those projects secured in Y1 and developing fundraising strategies for the post-project phase. In Y2 FMB also secured an Arcadia Marine Grant (training and capacity building for MPA management), Sea Bird Group (monitoring of the white-faced storm petrel breeding population in the Strict Reserve of Laja Branca in PNNM) and Mava (Assesing the impacts of an aquaculture project in the PNNM). Additionally, FMB agreed with the Municipality of Maio to implement ecotourism and conservation activities through a EU funded project running from April 16 to March 19. DNA secured a grant from the GEF to develop conservation activities in the RMCV MPA and other MPAs in Maio.</p> <p>Y3: SWOT (\$1000 USD), Arcadia (\$32000 USD), MAVA (633693 EUR). Grants submitted: MTCA (3 years - \$150000 USD), GEF-SGP (2 years - \$50000 USD), Riverbank Zoo &amp; Garden (\$5000 USD – not successful), Foundation Ensemble</p>

	(7795 EUR – not successful), African Bird Club (£1896). Prepared a GEF grant with MAA (34415.10 EUR) – still waiting on this outcome.
Activity 1.7. Produce MPA co-management standards and submit to the DGA for approval	<p>Y1: To be developed at later stages.</p> <p>Y2: Co-management standards and a proposal to formalise the co-management committee were negotiated with Maio's DGA representative and submitted to DNA in Praia.</p> <p>Y3: A revised co-management agreement was developed in Y2 by the three partners (DNA, CMM, FMB), however it was put on hold during 2016 due to national, local and presidential elections. PA management structure in Maio is still not defined and this will be done through the implementation of a GEF funded project lead by DNA.</p>
<p><b>Output 2. Participatory biodiversity monitoring and enforcement system in place in at least three MPAs in Maio</b></p>	<p>2a. MPA monitors record and report 7% annual increase in commercial and non-commercial indicator species in the surveyed areas in the network of MPAs. The baseline will be established at the start of the project in NTZs, MPA artisanal fishing zones and control sites outside MPAs</p> <p>2b. Community rangers daily patrol Maio MPA network and 20% annual reduction of illegal activities is recorded from the baseline established at the start of the project.</p> <p>Y1:</p> <p>2a. Baseline data started being collected mainly on marine megafauna species: shark species, focusing on nurse sharks, marine turtles, cetaceans, as well as activities being carried within MPAs such as fishing, cattle, etc. Additionally, citizen science data was also collected (“public sightings”) of target species (marine megafauna and some avifauna).</p> <p>2b. In Y1, there were a total of 544 patrols. Patrols were mostly focused in covering PNNM (488 surveys) with occasional patrols done in the other MPAs. Efforts would be further increased to cover the other MPAs with more regular patrols in Y2 and Y3.</p> <p>Y2:</p> <p>Both indicators remain appropriate. While indicator 2b is substantially on track, indicator 2a. has not shown the improvements we would hope for and is currently being missed:</p> <p>2a. Baseline continues to be compiled for key species, including list of official MPA indicator species agreed with government in Y2. 7% annual increase has not been observed – indeed at least one species (nurse shark) had a far lower population count in Y2 than Y1, although most show no substantial change. We hope this to be a sign of lag, and to see increases in Y3 reflecting the decline in inappropriate activities. Approval of the MPA management plan, allowing fuller control of fisheries would be critical to this.</p> <p>2b. Monitors patrolled PNNM 4 times a week, RMCV twice a month and occasional patrols to RNLC and RNPM (210 patrols in total, so somewhat less than daily). Efforts have intensified in Q4Y2 and will see daily patrols through Y3. Data compared from Y1 to Y2 evidence a reduction in the PNNM of illegal sand</p>

		<p>extraction (-33.3%; note that in Y1 sand extraction was added together with sand trucks observed), presence of cattle (-22.9%), number of visitors (-50.6% of residents and -66.7% of non-residents), sport fishermen (-69%), killed nesting loggerhead turtles (-42,9%) and poached sea turtle nests (no change from Y1-Y2 with also 9 poached nests in Y2 as in Y1.). Artisanal fishing boats decreased slightly (-6.2%). Main recorded illegal activities in other MPAs have been: RMCV (cattle, fishing boats, uncontrolled visitors and sport fishermen), RNLC (cattle and fishing boats) and RNPM (sand extraction, sports fishermen, fishing boats and cattle). Data on nesting loggerhead sea turtles killed and poached eggs evidenced a decrease in the remaining MPAs (turtles killed/poached eggs): RMCV (-57.1%/-66.7%); RNPM (none in both Y1 and Y2/-66,7%); RNLC (none in both Y1 and Y2/1 turtle killed in Y2 in relation to 0 in Y1); PPSPI (-100%/-50%).</p> <p>Y3:</p> <p>2a. There was an average annual increase of 6.7%, just under the target value (7%) from Y2 to Y3.</p> <p>2b. During the majority of Y3, MPA patrolling was focused on spreading efforts in all MPAs, thus 2 weekly patrols in PNNM, 1 weekly patrol for remaining MPAs (1/week RNLC, 1/week RMCV, 1/week RNPM-PPSPI), making a total of 272 patrols. In PNNM, there was a decrease of sand trucks observed (-25%) in comparison to Y2. Note that this decrease does not mean that sand extraction has decreased because sand trucks mostly extract sand during night time. Other indicators that decreased included the presence of cattle (-8.3%), the number of local visitors (-25.6%), sport fishermen (-77.8%), and artisanal boats (-12.3%). On the other hand, the number of non-resident visitors increased (33.3%), as well as the numbers of dead turtles (150%), and the poached nests (55.6%). The main illegal activities recorded in other MPAs were semi-industrial boats fishing within the 3 NM, fishermen, rubbish and presence of goats in RNLC; semi-industrial boats, fishermen, sand extraction, uncontrolled visitors cars, rubbish, uncontrolled visitors, and free cows in RNPM; semi-industrial boats, fishermen, rubbish, uncontrolled visitors and free grazing cattle (cows, goats) in RMCV. Data on nesting loggerhead sea turtles killed evidenced an increase in the remaining MPAs (turtles killed/poached eggs), whereas poached nests decreased in RMCV and RNPM, were the same in RNLC and increased in PPSPI: RMCV (566.7%/-100%); RNPM (increased from 0 to 1 dead turtle in Y2/-100%); RNLC (increased from 0 to 9 dead turtles in Y2/1 poached nests, same as in Y2); PPSPI (increased from 0 to 1 dead turtles in Y2/200%).</p>
<p>Activity 2.1. Develop participatory biodiversity monitoring training programme, protocols and databases and train participants</p>		<p>Y1: Land-based, snorkelling and diving surveys, and interview-based marine megafauna by-catch assessments were made, and protocols and databases put in place.</p>



	<p>Y2: these have expanded to include fieldwork methodologies and safety protocols. Substantial training was conducted in accordance with the training programme (see Activities 1.1, 1.2, 1.3)</p> <p>Y3: FMB monitoring surveys schedule was reduced to slowly adapt it to those of the Monitoring Plan for the Protected Areas. These will be completely adapted and surveys from the Monitoring Plan running from May 2017, depending on available budget. New protocols and data sheets were prepared and improved to fit the Monitoring Plan. Training has been given to all people involved in data collection: the marine team had regular training on fish identification, biomass and lately some on in water survey techniques, and on how to use coral cover analysis software (CPCe) using transect photographs; whilst the turtle programme had app. 60 out of the more than 70 people interviewed were trained for the turtle season from which app. 50 were community guards and 10 were turtle leaders. The number of nesting females tagged using PIT tags increased. The turtle hatchery increased from 10 to 24 nests, however their hatching success decreased slightly. The plan is to further increase the hatchery capacity during the next turtle season with MAVA funding and consider other places to carry on relocations in situ.</p>
<p>Activity 2.2. Develop participatory MPA network patrolling scheme, protocols and databases and train participants</p>	<p>Y1: MPA network patrolling scheme protocols and database developed</p> <p>Y2: MPA patrolling scheme protocols followed in Y2. Monitors and volunteers received ongoing training once a week throughout this year, focusing on data collection, entry and management, and the ID of bird and marine megafauna identification.</p> <p>Y3: MPA protocols reviewed, patrolling schedule changed in June 2016 to ensure regular patrols in all MPAs (2 weekly patrols in PNNM, 1 weekly patrol for remaining MPAs (1/week RNLC, 1/week RMCV, 1/week RNPM-PPSPI), as well as slight changes done to field sheet. More training on data collection, entry, management and on fish and bird ID, particularly focusing on waders ID. Joint Patrolling involving stakeholders occurred more efficiently this year with regular trips around the island, making a total of 8 trips, 7 confiscations and 5 fines since Oct 2016. For details on MPA patrolling scheme please see A2.1 &amp; A2.6.</p>
<p>Activity 2.3. Procure MPA patrol and biodiversity monitoring equipment</p>	<p>Y1: Basic equipment was acquired to equip community monitors, volunteers and FMB staff. Co-management team agreed that it is essential to involve as many as possible community members especially fishers. Thus, more GPS, binoculars and photo cameras is needed to collect data on biodiversity and human activities within MPA network.</p> <p>Y2: Safety, communications, educational and diving equipment purchased/updated, as well as underwater cameras for BRUVS survey.</p>

	<p>Y3: Equipment replaced during Y3, new equipment purchased for white-faced storm petrel surveys, snorkelling/diving surveys as well as safety and monitoring equipment for 4 GoS kits.</p>
<p>Activity 2.4. Identify effective incentives to encourage voluntary community participation in the MPA network patrols and biodiversity monitoring.</p>	<p>Y1: 148 public sightings on marine megafauna were reported back to FMB.</p> <p>Y2: A network of 15 community volunteers, covering all villages of Maio was established to collect and report sightings. 306 public sightings reported in Y2 (~107% increase from Y1).</p> <p>Y3: 180 public sightings on marine megafauna reported to FMB mainly by fishermen (~41% decrease from Y2). Additionally, incentives, training and community events for community participation carried on during this year with 6 community associations involved in patrolling during the turtle season from which 3 remained giving support in patrolling until the end of the season. For GoS, incentives included 20L of fuel per week per guardian (usually 4 active Guardians/week) and 4 safety/monitoring equipment kits.</p>
<p>Activity 2.5. Run surveys to establish baselines for biodiversity monitoring in the network of MPAs in Maio</p>	<p>Y1: Surveys included 20 shark transects, 5 exploratory dives and 30 exploratory snorkelling trips, 41 landwatch surveys for megafauna and fishing activities (7 in RMCV, 7 in RNLC, 12 in RNPM and 15 in PNNM) and 68 boat surveys. There were also 148 public sightings reported back to FMB. Turtle night patrols were done daily with several daily census.</p> <p>Y2: Surveys in Y2 include shark transects (24 surveys), in-water exploratory surveys (78 exploratory snorkelling surveys and 2 exploratory dives), in-water juvenile turtle surveys (36) and nesting turtle surveys, land-watch for megafauna and fishing activities (total 54 within MPAs: 17 surveys in RMCV, 3 in RNPM, 34 in PNNM), in-water conus surveys run by students from the University of Bath, whelk surveys (13 diving surveys, more than 120 trips to port landings, baseline survey of white faced storm petrel (<i>Pelagodroma marina</i>) (11 surveys). Additionally, there were 305 public sightings, 45 boat surveys to monitor for cetaceans, 15 surveys of BRUVS for elasmobranchs and fish surveys, 202 MPA patrolling surveys (38 RMCV, 4 RNPM, 160 PNNM) were also recorded.</p> <p>Y3: transect shark surveys (25 surveys), in-water exploratory surveys (48 surveys), in-water juvenile turtle surveys (111) and daily nocturnal nesting turtle surveys, landwatch surveys for monitoring of megafauna and fishing activities (total 141 within MPAs: 47 surveys in RMCV, 47 in RNLC, 26 in RNPM, 21 in PNNM), white-faced storm petrel surveys (9), public sightings (180), BRUVS for elasmobranchs</p>

	<p>and fish surveys (43 surveys), MPA patrolling surveys (total 272 within all MPAs: 68 RMCV, 39 RNLC, 47 RNPM- PPSPI, 118 PNNM), and boat surveys (40).</p> <p>Turtle night patrols were carried out every day whilst daily census covered the beaches that were not covered by the night patrols. These were done frequently. There were six times more nests, and more turtles killed and poached nests. However these are very likely related to having an unusual high number of female turtles nesting this year in the whole archipelago. Additionally, there was 1 green turtle nesting for the first time in Maio Island, in Praiona beach, close to Praia Gonçalo. Genetic samples were taken for later analysis and its nest has been monitored. Finally, the participative fishermen patrols run from June 2016 to end of March 2017 with 2 short breaks during Christmas holidays and during October for revision of methodology and data. A total of 282 events were reported during 30<sup>th</sup> June 2016 to 31<sup>st</sup> March 2017 from which 27 consisted of incidents. 6 incidents were intentional capture of loggerhead turtles, 2 others were concerning bycatch of protected species by artisanal boats, 15 incidents were of divers using dive tanks to fish, 3 were of semi-industrial boats fishing within 3 NM, 1 was an artisanal boat fishing within a No Take Zone. 20 of these incidents were intentional and twice the boat names were registered.</p>
<p>Activity 2.6. Conduct MPA enforcement patrols and biodiversity monitoring in the network of five MPAs in Maio</p>	<p>Y1: Patrolling in MPA started but quality control and data collection was relatively low. These were improved during Y2 and 3. There was a total of 544 MPA patrols: 13 patrols in PPSPI, 17 in Ponta Preta, 4 in RNLC, 13 in RNPM, 9 in Casas Velhas and 488 in PNNM.</p> <p>Y2: Efforts were focused on improving the quality of patrols in the PNNM and in patrolling more intensively in RMCV. Total of 202 patrols: 160 patrols in PNNM, 38 in RMCV and 4 in RNPM have been done. Currently four community monitors conduct 4 to 6 patrols per week in the PNNM. FMB monitors joined by voluntary community monitor the RMCV 3 times a week. Morro and Lagoa Cimidor PAs are monitored once a week by FMB monitors, project staff and volunteers. Note that Ponta Preta was included in patrols of RMCV and not noted as a separate patrol in Y2.</p> <p>Y3: Continued efforts to continue improving and standardize data collection were carried out in Y3. MPA patrols became more regular with monthly schedules prepared and distributed to staff. Total of 272 patrols: 39 in RNLC, 47 in RNPM, 68 in RMCV and 118 in PNNM. Note that during Y3, the patrol routes were changed to have RNPM and PPSPI covered as 1 patrol.</p>

<p>Activity 2.7. Monitor project progress using relevant indicators and produce project reports</p>	<p>Y1: As per activities 2.1-2.6.</p> <p>Y2: Two reports summarising the illegal activities reported in the patrols (Annex 7 and 13), and the biodiversity monitoring data in the MPA network (Annex 14), especially the PNNM, are presented in the supplements.</p> <p>Y3: Two reports on sand extraction were produced, as well as one report on biodiversity and another on activities happening within Protected Areas, as presented in the supplements.</p>
<p><b>Output 3. 80% of the population of Maio and relevant decision makers have information about MPA regulations, benefits and opportunities</b></p>	<p>3a. Annual increase of 23% in a number of Maio community members aware of MPAs, and adopting MPA regulations recorded in eight coastal villages.</p> <p>3b. By the end of year 3, Maio MPA co-management model is recognised by the government as a successful marine resource management example for replication in other Cape Verdean PAs</p> <p>Y1:</p> <p>3a. The social surveys performed in Y1 showed that 48% of people interviewed had knowledge on MPAs, 83% believed if MPAs were well managed and protected they could provide employment opportunities, whilst 41% had knowledge on regulations of natural resources.</p> <p>3b. Revision of Management Plan started in 2013, however there was no further news on it.</p> <p>Y2:</p> <p>3a. Y2 social surveys evidence a relative increase of 58% (28% absolute) in the knowledge of MPAs, going from 48% in 2014 to 76% in 2015, while knowledge of natural resource regulations went from 41% to 58%.</p> <p>3b. Indicators will be for Y3. Delays in approving MPA management plan continue.</p> <p>Y3:</p> <p>3a. Y3 social surveys showed a slight decrease from Y2 to Y3, with the knowledge of MPAs decreasing 20% from 73% to 53% but the knowledge on natural resources increasing from 73% to 82%. Even though the annual increase of 23% was not seen, overall in comparison to Y1, people are more aware with an average of 36% increase in the number of members more aware of MPAs and resources.</p> <p>3b. MPA Management Plan was not accepted within the project duration. It is currently still awaiting approval from the Government. The Monitoring Plan for Protected Areas done amongst FMB and stakeholders during the last semester of 2016 is also awaiting revision/ approval.</p>
<p>Activity 3.1. Assess the knowledge gaps of all stakeholders in Maio about MPAs</p>	<p>Y1: Key knowledge gaps of Maio stakeholders were identified during the socioeconomic surveys during this year.</p> <p>Y2: Socioeconomic surveys were redone in Y2 to assess the change in local knowledge and attitudes.</p>

	<p>Y3: Final survey done in March 2017 showed people are overall more aware of MPAs (5% increase from Y1 to Y3), the regulations of the use of resources (the amount of people with this knowledge doubled from Y1 to Y3), and don't believe their quality of life will be worse due to the prohibition of certain activities within MPAs (13% increase from Y1 to Y3).</p>
<p>Activity 3.2. Design MPA communication programme to reach diverse stakeholder groups in Maio and nationally</p>	<p>Communication strategies outlined in the project proposal have been implemented in both Y1 and Y2, and continued in Y3.</p>
<p>Activity 3.3. Deliver MPA messages to the local population in eight coastal villages in Maio and nationally</p>	<p>Y1: Several events related to MPAs and FMB's work in them were done during Y1 and included 4 workshops with communities on marine turtles (155 people and 20 public and private institutions), 3 on both marine turtles and sharks (94 people) and 1 6-day environmental training (378 people).</p> <p>Y2: MPA messages were delivered to 12 local communities through: local radio programmes, featuring MPAs and species-based programmes, social media (mainly FMB's facebook page), FMB's newsletter and included MPAs information in FMB and Municipality of Maio websites. Our joint work in Maio has also been featured in the FFI magazine. In October 2015, more than 180 locals from all villages participated in a community awareness event in the Para do Morro MPA. In March 2016, information panels were set up in Casas Velhas Marine Reserve, complementing those installed in Norte do Maio Natural Park. FMB also held two large events to promote Maio's MPAs: one a stand at the November 2015 sea fair in Praia (Cape Verde's capital) that was attended by the national President, and a cultural event and exhibition in Maio's capital in December 2015. In November 2015, FMB's work on MPAs was presented to more than 30 national and international organizations in the PRCM Forum held at the National Assembly. In November 2015, FMB held meetings with the University of Quebec and DNA on the perception of sea resources, with the presence of more than 20 stakeholders. Throughout Y2, 8 community beach clean-ups were organised by FMB in Maio's MPA', and a whale stranding awareness event in the PNNM when 24 pilot whales stranded in January 2016. Training events for shark release (attended by 129 fishers) and homestays (82 women at initial meetings, 44 for in-depth training) also included MPA messages.</p> <p>Y3: Workshops with fishermen community: 3 (1 in Aug 2016, 1 in Nov 2016, 1 in March 2017). Workshop with GoS (1 Dec 2016, 1 Jan 2017, 1 March 2017). Community activities often supported by FMB: PA monitors gave a presentation on National Sports Day along with "Together for a better environment" (Nov 2016), supported Carnival from schools of P. Vaz, Alcatraz and Vila on climate change and endangered species themes (Feb 2017), World Wetlands Day at the secondary school in Vila (school presentation to 6th, 7th grades and A level class followed by a school trip to Salinas for bird observation - Feb 2017), beach cleaning of L. Branca and islet on Jan 2017, 4 days of lectures on marine biodiversity and genetics with marine case studies in schools from Vila, P.Cão, Alcatraz and P. Vaz;</p>

	end of Darwin Project community activities showing summary of the project main aims and results in all 13 communities during 5 days of Apr 2017.
Activity 3.4. Communicate regular updates to relevant government institutions, international supporters and funders using MPA communication strategies	<p>Y1 and Y2: As part of CAPM co-management team, FMB communicates and implements activities with relevant local and national government departments. Weekly meetings are set with CAPM Director in Maio and every fortnight with the Municipality of Maio representative. Regular meetings also take place with the Marine Agency and the SDTIBM (Society for Tourism Development). Regular updates are also sent to project partners in the UK, Switzerland and Praia (UniCV, DNA) in Cape Verde.</p> <p>Y3: Meetings with stakeholders were carried on a regular schedule and FMB was invited to participate in the first PA workshop in Cabo Verde with National Government, local NGOs and other institutions: sharing experience as a NGO working and supporting management of Pas (Dec 2016)</p>
<b>Output 4. Livelihood diversification enterprises linked to marine ecosystem services and MPAs developed and owned by local women groups</b>	<p>4a. The ‘homestay for visitors’ scheme developed and at least 50 women-headed households in eight coastal villages introduced to the plan and opportunities by the end Q2 of year 1</p> <p>4b. At least 20 women-headed households start trialling homestay venture by the end of Q4 year 1</p> <p>4c. Annual increase of 30% in the participation of local households in the pilot project is recorded from the pre-project baseline of eight families established in 2013.</p> <p>4d. By Q4 of year 3 local women formalise their status as a small homestay business owners to effectively promote a well structured service for tourists in identified national and international markets</p> <p>Y1:</p> <p>4a. Homestay project introduced to 110 women during October 2014 which resulted with 95 families enrolled in participating in the trials.</p> <p>4b. A total of 36 houses were trialled until the end of Q4 Y1: 10 houses trialled from June-September 2014, and 26 houses trialled during February-March 2015.</p> <p>4c. In Y1, those 10 families that participated in the project represented a 25% increase from Y0 and received a total of 15 people (9 staff and 6 volunteers).</p> <p>4d. To be accomplished at a later stage.</p> <p>Y2:</p> <p>Indicators remain appropriate and on track, although they are less ambitious than the outcome indicator:</p> <p>4a. Of the 95 families that had expressed interest in participating in trials, 74 have done so.</p> <p>4b. 74 families have now participated in the trials. 41 houses were trialled in Y2, adding to the 33 houses in 13 villages trialled in Y1. Formal business registration is required before households can take up long-term business (see 4d. below)</p> <p>4c. In Y2, 16 families received short or long-term volunteers and tourists, in particular during summer, representing a 60% increase from Y1 results and a 100% increase from the baseline in Y0. Those 16 families received a total of 41 people in their houses (13 FMB staff and 28 volunteers).</p>

		<p>4d. Formalisation to be completed in later stages of the project. 3 local women and their homes were selected and started the process of formalising their business.</p> <p>Y3: 4a. Accomplished in Y1.</p> <p>4b. Done in Y1.</p> <p>4c. 25 families received short or long-term volunteers and tourists, in particular during summer, representing a 56% increase from Y2 and a 150% from Y1. These families received a total of 61 people (29 visitors, 19 FMB staff and 13 volunteers).</p> <p>4d. Business plan presented in December 2016. 3 local women and their homes were selected to have their homestay business formalised (March 2017) and inauguration of the hoses occurred soon after (April 2017). Additionally, 3000 leaflets with information on the 3 homestay houses were produced to promote that business (March 2017).</p>
<p>Activity 4.1. Prepare the participatory implementation plan for the homestay project</p>		<p>Y1: The Homestay Development Plan was prepared and 93 households expressed interest to participate in the Homestay programme.</p> <p>Y2 and Y3: carried on activities planned for the homestay programme.</p>
<p>Activity 4.2. Train the participants and help set to up in house structures to deliver the service to visitors</p>		<p>Y1: Introductory meetings in 13 communities were conducted in October 2014. Homestay trials were conducted in 33 houses in 13 villages in February-March 2015. Discussions with the government organization ADEI were done to provide training for small enterprise management with regards potential collaboration to support further training of homestay participants.</p> <p>Y2: 72 of the 93 initial households were still engaged. 82 women attended initial meetings and 44 follow-up workshops, which included a knowledge-exchange from an experienced host on another Cape Verdean island.</p> <p>Y3: Homestay training delivered to 25 women which included English classes, first aid, reception and tourist animation, cooking, health and safety at work and financial planning. Additional English classes run from February to April 2017.</p>
<p>Activity 4.3. Monitor participants' progress and provide assistance in delivering and promoting the service if needed</p>		<p>Y1: In April data was analysed and a meeting organised with women who hosted visitors during the first trial and others who expressed interest to participate. Strengths and challenges were discussed, further needs identified as well as the paths for improvement.</p> <p>Y2: A network of 11 focal points/champions was established. Guidance and fundraising to support other households were being prepared.</p>

		Y3: Host agreement and host satisfaction assessment in Homestay done from July to December 2016. Homestay leaflet done in March 2017 and distributed in April.
Activity 4.4. Support local women to organise themselves in a business group to formalise their status and promote their tourism product in national and international market		Y1: During the introductory meetings during the trial homestays two active participants in Alcatraz village were identified that could potentially become programme leaders for the south side of the island.  Y2: The business of 3 households were being formalised by FMB.  Y3: Contest/evaluation and selection of households for the formalization happened from December 2016 – February 2017. Homestay was officially formalised in March 2017 and the inauguration of the 3 selected households occurred in April 2017
Activity 4.5. Record and evaluate both MPA benefits to homestay project (e.g. higher species diversity that attract tourists to Maio) and local participants' contribution to the conservation of biodiversity in the MPAs (e.g. positive change of attitude and behaviour, more awareness)		Y1: Meetings were conducted with 8 women that hosted turtle conservation project volunteers and assistants, and showed that these families did not consume turtle meat and also advised their neighbours not to do so. They understood that conservation related activities could produce financial benefits over a longer term than simply eating a turtle.  Y2: Tourist and household attitudes to MPA are being monitored.  Y3: There was a 10% increase in people that replied they believed MPAs can benefit homestay tourism. There were increases in positive answers on knowledge of natural resources, MPAs and employment possibility of within MPA. Additionally, the majority of interviewers believed the protection of marine resources can help improvement of living conditions and there was a small increase from 62% (Y1) to 74% (Y3) of people that agree they don't believe their quality of life with get worse due to prohibition of certain activities within MPAs.
Activity 4.6. Prepare business plan for the Maio community homestays venture for the post-project phase, involving small-scale business consultants		Y1: NA – developed during Y2.  Y2: The business plan was being negotiated with ADEI agency, and it is expected to be finished before summer.  Y3: Business plan started in December 2016 and finalised in April 2017, after revision of stakeholder comments from January to March.
<b>Output 5. Tailored income savings scheme developed and being adopted by local fishing community members</b>	5a. Income savings programme tailored for fisher community developed in collaboration with local bank in Maio by Q3 of year 1  5b. Income savings scheme introduced and training delivered to local fisher community in eight coastal villages by Q1 of year 2	Y1:  5a. After analysis of the conditions of local banks such as BCN, BA, Caixa Económica that have branches on the island of Maio, it was decided that a new income savings scheme "Totocaixa Morabi" created by the Cape Verdean NGO MORABI offers the most suitable conditions to local fishers, fish sellers and other community members such as women involved in the homestay programme.  5b. The Morabi scheme was introduced to 10 communities on Maio in February-March 2015. Further meetings to continue in Cidade do Porto Inglês.  5c. There were only 3 people enrolled in the savings scheme.



	<p>5c. 10% increase in fisher participation in income savings scheme recorded annually from the baseline of 0%</p> <p>5d. Participants deposit at least 5% of income into the savings account each month starting from Q2 of year 2</p>	<p>5d. Only able to see in Y2.</p> <p>Y2:</p> <p>5a. The "Totocaixa Morabi" created by the Cape Verdean NGO MORABI and identified in Y1 has proven adequate for fishermen and fisherwomen's needs. However, adoption has been slow due mainly to the lack of capacity and infrastructure of Morabi in Maio.</p> <p>5b. The Morabi scheme was introduced to 10 communities on Maio in Y1, it was February-March 2015.</p> <p>5c. In February 2015, a 2 year collaboration agreement was signed between FMB and Morabi to further develop the delivery and evaluation of the "Totocaixa Morabi" savings scheme on Maio. Participation has increased at 10% relative rates in Y2 but remains low as an overall percentage of fishers, at 3%. Y3 will see more extensive outreach through a door-to-door campaign.</p> <p>5d. While Morabi do not yet collect data on members' incomes, deposits are in the range of 10%-25% of average income. Morabi will collect these data in Y3.</p> <p>Y3:</p> <p>5a. Accomplished in Y1.</p> <p>5b. Savings scheme introduced to 10 villages in Y1.</p> <p>5c. In Y1, 3 people enrolled in Totocaixa Savings scheme. In Y2 there was none. In Y3, 26 people enrolled in the scheme making a 475% increase from Y1.</p> <p>5d. There was an average of 1914 CVE deposit per month which is higher than 5% of the average income of fishermen.</p>
<p>Activity 5.1. Identify current fisher savings and fish catch baseline</p>	<p>Y1: Social surveys conducted in June-July 2014 showed that 43% of fishers catch 5-15kg/day, and 25% catch 16-40 kg of fish/day. The average fish price depending on species is approximately USD 4 per fish (300-350 CVE). It should be noted that they do not fish every day, and there may be days where they incur the necessary expenses for fishing (fuel, boat maintenance, crew daily wages) but are not successful and return with a very small or even no catch. Average amount available for monthly family expenses is 10,000-20,000 CVE. 48% of fishermen earn between USD 115-230 per month (10,000- 20,000 CVE per month), and 28% earned between USD 230-320 per month (21,000- 30,000 CVE). 50% of fishermen have a bank account but are not enrolled in any income savings scheme, and 39% have neither a bank account nor are involved in an income savings scheme.</p>	

	<p>Y2: Fish capture caught between 5-15 kg/day increased ~11% (61) in comparison to Y1 (55); fish capture of 16-40 kg/day decreased ~39.4% in Y2; and capture between 41-80 kg/day decreased 94%. There were no people adopting the Savings scheme during Y2.</p> <p>Y3: Fish capture caught between 5-15 kg/day decreased slightly, 4.9% from Y2, whereas capture of 16-40 kg/day increased 5.4%. Finally, capture between 41-80 kg/day increased 100%, in comparison to Y2. In Y3, 35% of fishermen interviewed would deposit their savings in their current bank account, 53% did not have any savings account, and 12% were enrolled in Totocaixa savings scheme.</p>
<p>Activity 5.2. Identify income savings schemes relevant to fishers and developed tailored information and training package for fisher community groups, with local bank manager</p>	<p>Y1: A new income savings scheme 'Totocaixa Morabi' developed by NGO Morabi was selected as the most appropriate for local fishers and other community members. The conditions are more favourable to individuals with a small income, and the annual interest rate is up to 6.5% which is 4-5 times higher than that of commercial banks. The sign up conditions are simple since the individual can use a regular bank account and start with savings from 1000 CVE (10 USD).</p> <p>Y2: FMB supported Morabi to produce information leaflets and develop workshops on "Totocaixa Morabi" savings scheme.</p> <p>Y3: Totocaixa Morabi scheme was carried on being introduced to local people to promote people's enrolment. Since Y1 there were 27 people that enrolled in Totocaixa savings scheme, mostly being merchants, employees and fishermen. Full report on this can be found in Annex 8.</p>
<p>Activity 5.3. Conduct training workshops and introduce fishers to the savings scheme in at least eight coastal villages in Maio</p>	<p>Y1: "Totocaixa Morabi" has already been introduced in 10 villages in Maio. The initial plan to target fishers was expanded to include women that showed interested in homestays programme as well other community members. The decision to widen the training reach was made based on awareness that very little information reaches remote villages on the island with most communication delivered in the capital town of Porto Ingles. Morabi representatives from Praia delivered the training alongside local representatives from Maio under the supervision of the President of Morabi.</p> <p>Y2: FMB supported Morabi to produce information leaflets and develop workshops.</p> <p>Y3: Door to door campaigns (run from June-September 2016) to promote "Totocaixa Morabi" (708 houses covered all over the island) and production of more leaflets (3000).</p>
<p>Activity 5.4. Monitor the progress of the adoption of the income savings scheme and fish catch using relevant indicators</p>	<p>Y1: First round of social surveys was run during July 2014 and had 164 people interviewed (104 men, 60 women). Approximately only 38% of the people interviewed during Y1 received between 10000 to 30000 CVE per month and more than half of the people interviewed (51%) were unemployed.</p>

	<p>Y2: The second round was run in 2015 during October/November and covered 128 people. MORABI is setting up a database to record individuals that sign up after the first round of outreach.</p> <p>Y3: During March 2017, the final round of social surveys was done and 136 people were interviewed (86 men, 50 women). Approximately 57% of people interviewed earned between 10000-20000 CVE and 29% were unemployed. This difference could be influenced by the different number of people interviewed throughout the years. This was due to the same people that were supposed to be interviewed in different years moved to different islands.</p>
<p>Activity 5.5. Evaluate the effectiveness of income savings scheme as a correlation between the fish catch, total income and fisher savings</p>	<p>Y1: To be assessed in later stages of project implementation.</p> <p>Y2: To be assessed in later stages of project implementation.</p> <p>Y3: Since there was no significant differences between fish catch during the 3 years, and therefore this was not an influencing factor in the number of people enrolling in the Savings Scheme, even though several people showed interest in adhering to the schemes (82% of people interested). The people interested in adhering to the scheme indicated the major reasons for not doing it so was: lack of knowledge, lack of financial resources, low awareness, neglect, lack of trust in Morabi and other schemes, as well as having other commitments.</p>
<p>Activity 5.6. Prepare business plan for the Maio community homestays venture for the post-project phase, involving small-scale business consultants</p>	<p>Y1: Not planned for year 1</p> <p>Y2: Not planned for year 2 as the homestay programme needed to be better developed before preparation of the business plan</p> <p>Y3: A simplified business plan for the homestay programme, adapted to suit the needs of the participants, was developed together with the local branch of the Agency for Business Development and Innovation (ADEI). ADEI assisted FMB in the process and financed half the cost of the plan. It was developed between December 2016 and February 2017 and validated by both FMB and ADEI in March. The consultant hired was from Maio, and received input from FMB, ADEI as well as several of the women participating in the program.</p>

## Annex 3 Standard Measures

Code	Description	Total	Nationality	Gender	Title or Focus	Language	Comments
Training Measures							
1a	Number of people to submit PhD thesis	0					
1b	Number of PhD qualifications obtained	0					
2	Number of Masters qualifications obtained	1	British	Male	Ecological assessment of endemic cone snails ( <i>Conus spp.</i> ) on Maio, Cape Verde”	English	
3	Number of other qualifications obtained	4 (Bachelors qualifications)	4 Cape Verdians	3 females 1 male	<p>Characterization of rubbish in the nesting areas of <i>Caretta caretta</i> in Maio Island.</p> <p>The role of tourism in the development of Maio Island</p> <p>The biology of whelk fisheries in the island of Maio</p> <p>Development of geotourism in Maio</p>	<p>Portuguese</p> <p>Portuguese</p> <p>Portuguese</p> <p>Portuguese</p>	

4a	Number of undergraduate students receiving training	35	Cape Verdians	17 females, 18 males		Portuguese/criolo	
4b	Number of training weeks provided to undergraduate students	46 weeks	Cape Verdians	17 females, 18 males	“The geotourism potential in Maio Island” “The issues of sand extraction on the beaches of Maio Island”		
4c	Number of postgraduate students receiving training (not 1-3 above)	4 (1 PhD and 3 Master students) 2 Master students with pending submissions	1 German, 1 Dutch, 1 Spanish, 2 British, 1 Portuguese	3 females 3 males		English	
4d	Number of training weeks for postgraduate students	37 weeks (1 PhD student: 5 weeks; 5 Master students: 32 weeks)					
5	Number of people receiving other forms of long-term (>1yr) training not leading to formal qualification (e.g., not categories 1-4 above)	4 community monitors x 2 years 3 FMB staff x 2 years 5 local volunteers	Cape Verdians Portuguese	4 females 8 males			

6a	Number of people receiving other forms of short-term education/training (e.g., not categories 1-5 above)	1806	Cape Verdians, Portuguese, English	455 males 422 females			
6b	Number of training weeks not leading to formal qualification	Y1: 6 days in each of 12 communities Y2: 1 week's training on each of ecotourism and conservation. One month internship on conservation and tourism. 7 one-day workshops Y3: 7 training courses, total of ~21 weeks					
7	Number of types of training materials produced for use by host country(s) (describe training materials)	1 shark ID guide 2 ID guides of common marine megafauna species (1 <sup>st</sup> version - 2015 and latest updated					

		<p>version – August 2016)</p> <p>1 ID guide of <i>Conus</i> species</p> <p>1 bird ID guide (2014)</p> <p>1 GPS/Radio user guide for GoS produced by FMB with the summary of fisheries law on the back produced by Ministry of infrastructures and maritime economy of Cape Verde</p> <p>1 shark by-catch release guidelines</p> <p>2 PA information documents (1 booklet and 1 brochure)</p> <p>9 different information panels on PAs</p> <p>1 simplified English/criolo/</p>					
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		Portuguese/French dictionary 1 safety protocol 2 monitoring protocols 3 ID training tests (1 of bird species, 2 of fish species) 1 egret/heron ID guide					
Research Measures		Total	Nationality	Gender	Title	Language	Comments/ Weblink if available
9	Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (ies)	5	NA	NA		French, Portuguese	1 Management Plan, 1 Monitoring Plan, 1 MAVA national seabird management plan, 1 MAVA turtle action plan, 1 national management and conservation plan for sharks
10	Number of formal documents produced to assist work related to species identification, classification and recording.	2 megafauna ID guides 1 bird ID guide 1 PA communication and rural tourism information brochure	Cape Verdian	Female	"Megafauna species ID Guide" - put together and printed by FMB for FMB staff and fishermen that participate in citizen science via public sightings and "Guardians of the	Portuguese	



		<p>26 (marine programme data collection sheets)</p> <p>8 (marine turtle programme data collection sheets)</p> <p>1 Monitoring Plan (including relevant data collection sheets)</p> <p>1 user manual on how to analyse and record BRUVS (Baited remote underwater video stations) data</p> <p>4 (1 Foundation Ensemble report, 1 Earthwatch Neville Shulman Awards Half year report and 1 final report, 1 biodiversity report for</p>		Male	<p>Sea” Programme (2 versions)</p> <p>“Bird ID Guide” – created and printed by Alex Tavares for use during PA patrolling (1 version)</p>	Portuguese	
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		aquaculture project ) + 18 reports from the conservation turtle programme					
11a	Number of papers published or accepted for publication in peer reviewed journals	2	Cape Verdian	Female	“Sea turtle, shark and dolphin bycatch rates by artisanal and semi-industrial fishers in the Island of Maio, Cape Verde” – 2016	English	<a href="http://www.bioone.org/doi/abs/10.2744/CB-1213.1?journalCode=ccb">http://www.bioone.org/doi/abs/10.2744/CB-1213.1?journalCode=ccb</a>
			Portuguese	Female	“First record of smoothtail mobula <i>Mobula thurstoni</i> (Myliobatidae) in Cabo Verde” - 2017	English	<a href="http://www.scvz.org/zoolcv/vol6no1/ZoolCV20176%281%29_Ratao%20etal_Mobula%20thurstoni%20CV.pdf">http://www.scvz.org/zoolcv/vol6no1/ZoolCV20176%281%29_Ratao%20etal_Mobula%20thurstoni%20CV.pdf</a>
11b	Number of papers published or accepted	0					

	for publication elsewhere						
12a	Number of computer-based databases established (containing species/generic information) and handed over to host country	69 (16 in 2014, 8 in 2015 (5 are counted in 2014 as they were continued on the same excel file), 23 in 2016 and 17 in 2017					64 marine databases (including Leno's patrolling datasheets too) + 3 database from homestay programme (1 control sheet with all ladies' information, 1 assessment feedback, 1 visitors guest satisfaction database) + 2 databases (1 socioeconomic questionnaire, 1 door-to-door control database)
12b	Number of computer-based databases enhanced (containing species/genetic information) and handed over to host country	7					1 BRUVS, 4 patrol sheets AMPs, 1 GoS monitoring database + 1 enhanced socioeconomic database
13a	Number of species reference collections established and handed over to host country(s)	0					
13b	Number of species reference collections enhanced and handed over to host country(s)	0					

Dissemination Measures		Total	Nationality	Gender	Theme	Language	Comments
14a	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work	7	NA	NA		Portuguese, French, English	Mava turtles May 2016, Mava infrastructure Apr 2017, 3 workshops for the management and conservation plan for sharks, 1 MAVA seabirds workshop 2016, 1 conference of Protected Areas
14b	Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated.	7					TAOLA 2014, TAOLA 2015, TAOLA 2016 35º Simpósio Internacional de Biologia e Conservação das Tartarugas Marinhas, Fórum do Programa Regional para a Conservação

Dissemination Measures		Total	Nationality	Gender	Theme	Language	Comments
							das Zonas Marinhas e Costeiras da África Ocidental, Fórum das ONGs 2016, Simpósio da ISTS 2016,

Physical Measures		Total	Comments
20	Estimated value (£s) of physical assets handed over to host country(s)		
21	Number of permanent educational, training, research facilities or organisation established		
22	Number of permanent field plots established		Please describe

Financial Measures		Total	Nationality	Gender	Theme	Language	Comments
23	Value of additional resources raised from other sources (e.g., in addition to Darwin funding) for project work						

## Annex 4 Aichi Targets

	Aichi Target	Tick if applicable to your project
1	People are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.	√
2	Biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	√
3	Incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.	
4	Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.	√
5	The rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.	
6	All fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.	√
7	Areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.	
8	Pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.	
9	Invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.	
10	The multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.	√
11	At least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	√
12	The extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.	√
13	The genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.	

14	Ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.	√
15	Ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.	
16	The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.	
17	Each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.	√
18	The traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.	
19	Knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.	√
20	The mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.	

## Annex 5 Publications

Type * (e.g. journals, manuals, CDs)	Detail (title, author, year)	Nationality of lead author	Nationality of institution of lead author	Gender of lead author	Publishers (name, city)	Available from (e.g. web link, contact address etc)
ID Guide	Megafauna Species ID Guide, Thomas Oosting, 2014	Dutch		Male	NA, Cidade do Porto Inglês	FMB
ID Guide	Megafauna Species ID Guide, Sara Ração, 2016	Portuguese	Cape Verdian	Female	NA, Cidade do Porto Inglês	FMB
ID Guide	Birds ID Guide, Alex Tavares, 2015	Cape Verdian	Cape Verdian	Male	NA, Cidade do Porto Inglês	FMB
Scientific paper	Sea turtle, shark and dolphin bycatch rates by artisanal and semi-industrial fishers in the Island of Maio, Cape Verde", Katia Lopes <i>et al.</i> , 2016	Cape Verdian	Cape Verdian	Female	Chelonian Conservation and Biology, NA	<a href="http://www.bioone.org/doi/abs/10.2744/CB-1213.1?journalCode=ccab">http://www.bioone.org/doi/abs/10.2744/CB-1213.1?journalCode=ccab</a>
Scientific short note*	First record of smoothtail mobula <i>Mobula thurstoni</i> (Myliobatidae) in Cabo Verde, Sara Ração <i>et al.</i> , 2017	Portuguese	Cape Verdian	Female	Sociedade Caboverdiana de Zoologia (Zoological Society of Cabo Verde), NA	<a href="http://www.scvz.org/zoolcv/vol6no1/ZoolCV2017_6%281%29_Ratao%20etal_Mobula%20thurstoni%20CV.pdf">http://www.scvz.org/zoolcv/vol6no1/ZoolCV2017_6%281%29_Ratao%20etal_Mobula%20thurstoni%20CV.pdf</a>



## Annex 6 Darwin Contacts

<b>Ref No</b>	21-021
<b>Project Title</b>	Enhancement of wellbeing and conservation in Cape Verde's biodiversity hotspots (Ref: 2324)
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