

Darwin Initiative Main Annual Report

To be completed with reference to the “Project Reporting Information Note”:
(<https://www.darwininitiative.org.uk/resources-for-projects/information-notes-learning-notes-briefing-papers-and-reviews/>).

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

Submission Deadline: 30th April 2022

Darwin Initiative Project Information

Project reference	27-006
Project title	Developing an incentive-based model for community-led marine conservation in Comoros
Country/ies	The Comoros
Lead partner	Blue Ventures Conservation
Project partner(s)	Dahari, Mohéli National Park, The National and Regional Fisheries Directorate
Darwin grant value	£342,142
Start/end dates of project	1st October 2020 - 30th September 2023
Reporting period (e.g. Apr 2021 – Mar 2022) and number (e.g. Annual Report 1, 2, 3)	1st April 2021 - 31st March 2022 Annual Report 2
Project Leader name	Dr Alasdair Harris
Project website/blog/social media	https://blueventures.org/
Report author(s) and date	Fanchon Wright and Effy Vessaz, 29th April 2022

1. Project summary

The Comoro archipelago sits at the centre of the Northern Mozambique Channel, an ecoregion with the second highest marine biodiversity globally. This marine biodiversity is critical to the Comorian people: 20% are fishers and over 70% of the rural population rely on fish for protein (Obura, 2012). The young, rapidly increasing population in the Comoros depends on dwindling fish stocks and farming for food security and income.

The project is based on Anjouan, the poorest and most populous island. Population growth has increased pressure on agricultural land and traditional extensive farming methods harm soil fertility, resulting in low yields. Soil erosion also leads to the silting of coral reefs, affecting marine biodiversity.

Drawing on the successes of Madagascar’s growing locally managed marine area (LMMA) movement, the Mohéli Marine Park, and Blue Ventures (BV) and partner Dahari’s work to date in the Comoros, the project will develop a community-led marine conservation model for the Comoros that improves fishers’ livelihoods and conserves reef biodiversity, laying the groundwork for its wider replication.

The project aims to improve the livelihoods of 1,500 small-scale fishers in the Comoros whilst reducing pressure on fisheries and enabling effective management of 350 hectares (ha) of coral reefs, conserving marine biodiversity. A replicable, locally-led marine management model developed with ten communities on the island of Anjouan will incentivise adaptive fisheries management in three different coastal areas (see Figure 1). Additional activities will add value to catches and increase agricultural production, diversifying and improving livelihoods. Best practices will be shared with the government and partners, supporting replication nationwide.

BV has been working in zone 1 (Vassy) since 2016 with three local fishers' associations spanning four villages: the fisherwomen association Maecha Bora, the fishermen's association Malezi Mema in Vassy, Dzindri and Salamani, and the fisherwomen's association Fikira Ndjema in Imere. We initiated activities in zone 2 (Moya) in early 2021, conducting scoping activities in three communities; Moya, Kowe and Maweni. We are now supporting seven fishers' associations to implement fisheries management in this zone. Activities in zone 3 (Dar Salama) will start early year 3 (May - June).

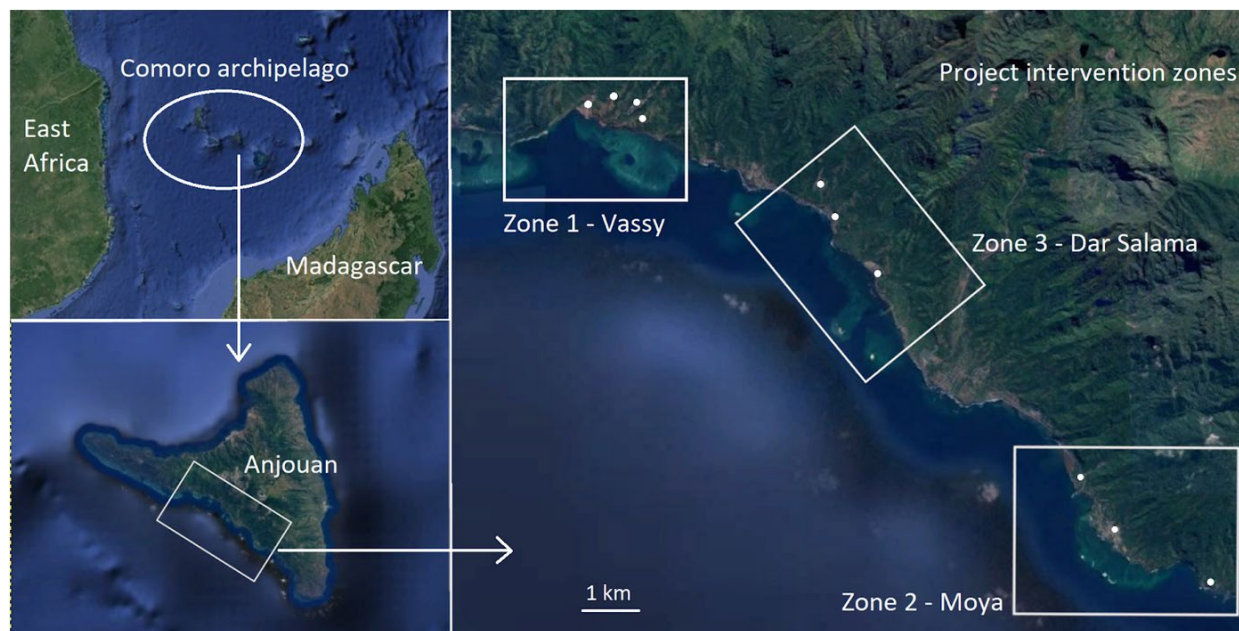


Figure 1: Project location. White dots inside the rectangles on the right show the different communities included in each zone.

2. Project stakeholders/ partners

Dahari is the implementing partner of the project, with close collaboration with two BV staff members in-country to provide technical support. Following the departure of Dahari's Project Manager in October 2020, a second BV staff member, Fanchon Wright, was hired in July 2021 to provide dedicated support to Dahari in managing their marine programme.

Overall, all project activities are developed and implemented with input from both organisations. For example, catch monitoring is supported by BV's expertise in Monitoring & Evaluation (M&E) systems. In turn, BV also benefits from Dahari's achievements, for example, specific approaches to awareness-raising and capacity-building developed by Dahari, such as collaborating with theatre groups and using role plays or games to develop leadership skills, are then shared internally for inspiration and guidance across BV's work globally.

Collaborations with other partners on the project are ongoing and include Moheli National Park, Fisheries Directorate and Fishers Trade Union.

With Moheli National Park, a support visit took place in February to review the partnership and plan support needs moving forward, for instance in fisheries management, governance and M&E, following a long break in regular visits due to COVID-19 restrictions preventing travel between islands. Two representatives from the Moheli National Park also took part in the national workshop organised at the end of February 2022.

This national workshop was organised in collaboration with the National Directorate of Fisheries, including the Regional Fisheries Directorate and the Fishers' Trade Unions, amongst representatives from fishers' associations and other institutions. The aim was to exchange experiences on fishery temporary closures, as well as strengthen ties between fishers and institutions.

We have kept regular telephone communications with the Fisheries Directorate, Fishers' Trade Unions' representatives, as well as Shisiwani National Park (Zone 1). These communications included SWIOFish project coordinators until the project came to a close in September 2021. We continue to involve local technical specialists who supported the SWIOFish project in our initiatives, for instance in the recent national workshop, to share their experiences. They have shared with us the tools and approaches used during the project, to ensure these are used to support fisheries management in the future.

Regular communications are also ongoing with a new Food and Agriculture Organization (FAO)-funded regional project (REEFFish), which is being implemented in five countries between 2021 and 2023, including in the Comoros, and aims to preserve coral reefs and improve fishers' livelihoods. The project also targets Moya, part of zone 2, and therefore we have been meeting regularly to align approaches, in the presence of government representatives. Considering their anecdotal evidence of reduced presence on the ground, they recognised the value in our continuous field presence and collaborative approach with communities, and have agreed to appoint us to manage governance related activities and fisheries management in this coastal area.

During Year 2, we have been collaborating more closely with the Fishers' Trade Unions' representatives, developing together a strategy to better support communities in zone 1 and zone 2 and strengthen governance. Tailored to the unique contexts of both zones, this has involved organising workshops and meeting with different stakeholder groups, from fishers to local authorities, to discuss how to improve local governance and legitimise it. For instance, in zone 1 a multi-year agreement on temporary closures is currently being drafted, outlining roles and responsibilities of local associations clearly (compared to each closure being formalised in a local document, repeating process each time). The involvement of the Fishers Trade Unions representatives have increased community support through their important image as fishers' authority and link to government.

A new collaboration started this year to strengthen reef monitoring systems across the Comoros with the NGO AIDE on Grande Comore, and the project RPOC funded by Oceans5 (2021-2024) aimed at strengthening Comoros national parks. This work also includes the Moheli National Park, the REEFFish project and the National Research Institute. A workshop was organised at the end of February to exchange experiences and aim at standardising monitoring procedures, with further joint trainings planned for the year ahead.

3. Project progress

3.1 Progress in carrying out project Activities

Output 1. Locally-led fisheries management measures piloted in two new coastal areas (Dar Salama and Moya) and continued by communities in the coastal area of Vassy on Anjouan (ten communities in total), preserving marine resources and providing livelihood benefits.

All activities have taken place in the coastal area of Vassy (hereafter zone 1) and are on track. Activities have started in a second coastal area, Moya (hereafter zone 2) following a delay in the last reporting period. Activities will start in Dar Salama (hereafter zone 3) in the next quarter as planned.

For awareness-raising (Activity 1.1.1), eight theatre performances on the topics of sustainable fishing, regulations for fishery closures and benefits of a permanent no-take zone were conducted, reaching an audience of 647 people across seven villages. To promote the officialisation of the permanent no-take zone, a campaign of posters and leaflets was launched, supported by Dahari's mobilisation team to inform communities about the management measures. 95 reef gleaners from zone 1 (all women) were trained in the use of the wooden spear 'mwiri' to replace the metal rebar 'ntsontso' as a more sustainable fishing technique (Activity 1.1.2) with 86.6% using this method over the reporting period (April 2021 - Mar 2022) compared with 40% at the start of the project in October 2020 based on our continuous catch monitoring data. Training has not yet started, but is planned for zone 2. Prior to the temporary closure in zone 1 (July - November 2021) five meetings were held to discuss implementation, resulting in an agreement on the duration and rules of the closure (Activity 1.2.4) (see supporting document 1, Verbal Procedure 4th temporary closure Vassy).

In zone 2, three temporary closures were put in place (May - October 2021, November - February 2022, March - April 2022) by the fishermen's association in Moya, without stakeholder consultation or the support of Dahari / BV. Understandably, this led to conflicts with different resource users within the community of Moya and neighbouring villages of Kowe and Maweni who share the reef flat. We have since been working to strengthen associations and governance systems to address this via several workshops organised with the fishermen's association, the fisher trade union president and the mayor. In March 2022, the creation of a committee with representativity from all relevant stakeholders was agreed (to be developed in the next quarter) and it was agreed that no decision could be taken without the prior consent of the committee.

In zone 1, association representatives continued to be supported to raise awareness about using the "mwiri", instead of the destructive "ntsontso", to catch octopus (Activity 1.3). Through a combination of this activity and recurrence of gear restrictions during reopenings, the community and fishers' association members from Maecha Bora and Malezi Mema approached Dahari / BV to provide training on the use of this method.

Livelihoods and KAP (knowledge, attitude and practices) surveys (Activity 1.4.2) baseline was completed for zones 1 and 2. Respectively 864 and 681 surveys for each zone. The surveys targeted fishers and the wider community to assess their knowledge and perceptions around marine management, and their livelihoods strategies. The baseline will serve as reference to compare end-of-project surveys for project impact.

Output 2. Ten communities from three coastal areas of Anjouan have access to data and improved knowledge for identifying key biodiversity hotspots and guiding adaptive management of local marine resources.

40 new technicians have been trained (85% women) across zones 1 and 2 (Activity 2.1) and participatory fisheries and reef monitoring are operational in both zones (Activity 2.2.1). Fisheries monitoring is conducted over 12 sites and reef monitoring over 12 sites across the two zones. Key biodiversity hotspots for zone 2 were identified through participatory mapping (Activity 2.2.2) in June, prior to the start of monitoring activities. This activity was instrumental in site selection for reef monitoring (Activity 2.2.1). Mapping was completed in the previous reporting period for zone 1.

Community feedback sessions were able to recommence during this reporting period (Activity 2.3.4). In June 2021, six sessions were held to present the results of reef gleaning data for zone 1 (405 participants); In November, six sessions were held in zone 1 (259 participants) and four sessions in zone 2 (176 participants) to feed back data on the three days after the reopening of the reef flats. In March 2022, six sessions were held to feed back data on the boat catches (339 participants). Flyers and posters were also distributed in August to promote awareness of the permanent no-take zone.

10 members of the fishermen's association (Malezi Mema) and 15 members of the fisherwomen's association (Maecha Bora) were trained in data analysis (Activity 2.3.3). The curriculum includes scenarios to introduce and discuss how management measures can affect marine resources positively as a first step towards adaptive management. Seven members of

Malezi Mema were subsequently trained in presenting data, two of which were able to co-present during the feedback sessions in March (Activity 2.3.2 & 2.3.4).

Association general assemblies were pushed back until October 2022 for zone 1 associations due to social gathering restrictions in relation to COVID-19. A review of catch monitoring data (Activity 2.4) was organised during the assemblies, initiating discussions around the next closure period. In zone 2, associations are newly formed or reorganised during this reporting period, and training in data analysis has not yet started.

Output 3. The livelihoods of 400 fishers (200 women) from ten communities are improved through the adoption of value-addition activities for marine products and/or complementary sustainable agriculture activities.

The baseline study on catch value-addition opportunities was completed by a consultant in September 2021 (Activity 3.1.1). Participatory workshops to share the results of the study were originally planned for mid-year 2 to coincide with the consultant's visit (Activity 3.1.2). However, due to COVID-19 related travel restrictions this was postponed and completed in March 2022. The study included recommendations and opportunities for value-addition; two techniques for drying and smoking fish and octopus. During the consultant's visit, training was organised for 37 fisherwomen from Maecha Bora (see supporting document 2 - Consultancy report).

In July, six women from zone 1 participated in a learning exchange visit to Grande Comore where they visited similar organisations producing smoked and dried fish products. Their learning was subsequently fed back to their respective associations. 15 women from two associations in zone 1 took part in a business skills workshop which focused on key concepts of the business mindset, bookkeeping, understanding the marketplace and product storytelling. As a result of this, Maecha Bora was motivated to better organise their storage facilities and job partitioning (sharing responsibilities and tasks including buying fresh product, processing, and sales). Regular follow up sessions are organised with the fisherwomen's association Maecha Bora to support their product transformation activities (Activity 3.2.2). A small tasting event with neighbouring communities was held in March to demonstrate the smoking process and promote the products. The marketing strategy has been developed by the consultant and BV and Dahari will continue to provide support to raise awareness of the products and move towards functioning more independently. Value addition activities have not yet started in zone 2, however this can now be reproduced quickly once associations and governance systems are strengthened.

For agriculture activities, in zone 1, 323 fishers (86% women) were trained in crop rotation and association of different cultures, multiplication of banana trees and compost making (Activity 3.3.1). Dahari technicians visit and support farming groups at least once a week and provide technical input where needed (Activity 3.3.2). Agricultural activities have not started in zone 2 for fishers, as we are first strengthening local associations.

Livelihoods surveys (Activity 3.4) baseline data were collected for zone 1 and 2. This will commence for zone 3 following completion of activities related to output 1.

Output 4. The first LMMA in the Comoros is established in one coastal area, with the foundations laid for additional LMMAs in two further areas, as a result of governance structures that are created and supported to design, implement and enforce adaptive fisheries management.

Community-led marine management has continued to develop with management measures repeated in zone 1 (temporary closure) and the establishment of the first community-led permanent no-take zone officially written into law in August.

In zone 1, members of all three associations have received training in management and leadership skills (Activity 4.1.2) and Dahari maintain a continued presence and support for both association management and implementation of activities (Activity 4.1.3), which is key to building members' confidence and independence in the long-term.

In zone 2, work commenced in earnest in April 2021. Four associations have been formed or restructured with the goal of forming another two, therefore establishing a men's and women's

association in each of the three villages. Two associations in Moya have completed their leadership and management training (27 participants, 55% women) (Activity 4.1.2). A SWOT analysis (Activity 4.1.1) was conducted with the men's association in Moya as a means to highlight the need to address internal governance issues. This resulted in the association calling an Annual General Meeting (AGM) and holding a vote for members of the board.

Training sessions on LMMA establishment and management (Activity 4.2.1) have started with a workshop involving seven representatives from the three local associations in zone 1. The learning exchange with another community managing a LMMA (Activity 4.2.2) has not taken place yet. However, a learning exchange is being planned for zone 1 associations to visit BV partner associations in Q3. Initial workshops to discuss with communities the benefits of LMMAs (Activity 4.4.1) and to develop rules and regulations and support for initiatives (4.4.2 - 4.4.3) will commence after the exchange visit.

Support to enforce and penalise infractions (Activity 4.3) has been ongoing in zone 1 with meetings organised prior to and during the temporary octopus closure to follow-up surveillance effectiveness (see 1.2.4 & 1.2.5). During the July - November closure, two infractions were recorded and one penalised. The second infraction (octopus gleaning within a closure area) was carried out by a teenager who was let off with a warning. In zone 2, surveillance and enforcement measures are not well organised (no logbooks), but are periodically carried out by the men's association in Moya. More support will be provided once the governance is collectively strengthened.

Output 5. A network of fishing communities and implementing partners in the Comoros shares best practices in local fisheries management and community conservation.

Engagement with project partners has continued and collaboration was initiated with several organisations during year 2 (Activity 5.1.1 and 5.1.3). For instance, we started exchanging with the NGO AIDE on Grande Comore on community-based management and reef monitoring methodologies, as well as with the National Research Institute to share methodologies and results for catch monitoring. Representatives from these institutions were invited to the workshop in Activity 5.1.2.

Partner workshops to share best practices (Activity 5.1.2) started in February. This included a national workshop on temporary closures across the three islands of the Comoros. A wide spectrum of stakeholders was represented including fishers, national and regional directors, National Parks, national research agencies and other partners. Following that, a workshop on reef monitoring methods was held to standardise the methodologies used across the Comoros and establish a minimum standard. This will in turn make data sharing and future collaborations easier in terms of supporting training and collaborative report writing. A third workshop was conducted to identify how we could collaborate and support monitoring, evaluation and learning across the organisations. A needs assessment was launched and this will in part influence the partner support activities planned as per Activity 5.1.4.

Three local exchange visits were organised during this reporting period (Activity 5.2). In August 58 participants (52% women) took part in two simultaneous exchanges (women and men separated) where zone 2 fishers and association members visited zone 1 associations. The objective was to learn about how the associations were functioning, their objectives and the manner in which they work with Dahari / BV to manage marine resources and participate in income generating activities. A second event was held where zone 1 association members went to visit zone 2 communities to reinforce ideas discussed in the first exchange visit as well as provide specific advice about managing a reopening. Feedback from both visits was positive and zone 2 association members started to understand the bottom up management model. Another regional exchange visit took place to Grande Comore for five Anjouan fisherwomen to visit a women cooperative involved with fish smoking and other associations on fisheries management.

Regular media outputs continue (Activity 5.3.1) through Dahari social media (21 Facebook posts), articles published on the national fisheries closure workshop and the officialisation of

the permanent no-take zone. In addition [a blog](#) was released on the BV website in August on participatory mapping to inform management.

Development of a film (Activity 5.3.2) and manual for best practices in community-based management in the Comoros (Activity 5.4) will be initiated during year 3.

3.2 Progress towards project Outputs

Output 1. Locally-led fisheries management measures piloted in two new coastal areas (Dar Salama and Moya) and continued by communities in the coastal area of Vassy on Anjouan (ten communities in total), preserving marine resources and providing livelihood benefits.

Although intermittent disruptions related to the COVID-19 pandemic continued, we were able to make good progress this year. In zone 1, management measures, including a document on rules and regulations for the temporary closure, were repeated and shared with local authorities and communities. As a result of the repeat gear restrictions (use of *mwiri*), continued awareness raising in the community and training sessions, the majority of fishers are now using more sustainable methods both during the reopening and habitually, during daily fishing trips. (96% and 86.6% respectively compared to 40% overall at the start of the project).

After initial focus groups in zone 2, community members indicated that they were keen to implement management measures. However, a small number of association members from the Fishermen's Association, perhaps inspired by the success in zone 1, acted too hastily in putting in place temporary closures without sufficient stakeholder consultation or support in the process from BV / Dahari. This created conflicts within and between the community(ies) in zone 2 which we are now addressing, however, we anticipate potential delays in this zone while we rebuild relationships and install good governance principles.

The first community led no-take zone was officialised in August, gaining legal status. This was led by the men's boat fishers association Malezi Mema. Fishers have indicated an increase in fish diversity and abundance as a result (awaiting verification), including the return of some market species.

Activities are planned to start in Year 3 Q1-2 for zone 3.

Output 2. Ten communities from three coastal areas of Anjouan have access to data and improved knowledge for identifying key biodiversity hotspots and guiding adaptive management of local marine resources.

40 new community monitoring technicians have been trained in this reporting period across both zones (85% women), with a total of 52 people trained since the beginning of the project. There is continuing interest in participating within the community as a stepping stone to understanding the status of local fisheries and marine management. Mobile based catch monitoring is in place in zones 1 and 2.

Participatory mapping to identify key biodiversity hotspots and key areas with high anthropogenic impacts took place in zone 2 in June 2021. The results were used to inform the location of reef monitoring sites. All these activities will start in the next quarters in zone 3.

In terms of using data to understand and guide adaptive management, training was provided to 25 association members from zone 1. The curriculum we have used to date is quite detailed, and upon reflection, we plan to reduce the depth of knowledge to be able to reach more members, following the initial course with a core group of active members. This will enable more members to be more actively involved in presenting data and in discussions towards the next step of governance - moving towards LMMA as per output 4. This activity is planned to be replicated in zone 2 in Q3, and in zone 3 towards the end of year 3.

Output 3. The livelihoods of 400 fishers (200 women) from ten communities are improved through the adoption of value-addition activities for marine products and/or complementary sustainable agriculture activities.

Steady progress has been achieved during this reporting period to support livelihood improvement initiatives in zone 1. Six women participated in a learning exchange with associations on Grande Comore and 37 women received training on drying and smoked products in March. Although progress during the past year has been delayed due to travel restrictions of the consultant due to COVID-19 (trip delayed from mid-year 2 to March 2022), this enabled the associations to have time to better organise their task management, bookkeeping and organisational structures. Six mobile smokers have been constructed, and will be distributed to three villages in zone 1 to increase ease of access to materials.

In zone 2, the product transformation activities have not started yet. This will start in the next quarter for associations that are sufficiently organised.

Agricultural support continues to be strong in zone 1 with 519 participants taught during this reporting period, of which 323 are fishers. In zone 2 Dahari has traditionally supported agricultural activities, mainly targeting non-fishers. Support targeted specifically for fisher members of associations has not started yet due to governance issues needing to be addressed first.

Output 4. The first LMMA in the Comoros is established in one coastal area, with the foundations laid for additional LMMAs in two further areas, as a result of governance structures that are created and supported to design, implement and enforce adaptive fisheries management.

Milestones towards Output 4 are well in place with management measures repeated in zone 1, and a long-term management measure in place (no-take zone), officialised in August. Association training sessions in zone 1 have also been completed. Discussions on LMMA benefits will continue, supported by evidence of the status of the reefs and fisheries from output 2.

Output 5. A network of fishing communities and implementing partners in the Comoros shares best practices in local fisheries management and community conservation.

Engagement with partners has progressed well over year 2 with regular meetings and phone exchanges with local partners on Anjouan. Collaboration has been initiated with new organisations such as AIDE on Grande Comore and the National Research Institute, with representatives invited to the national workshop organised at the end of February. The workshop was an opportunity to develop synergies amongst fisher representatives and various institutions across the three islands.

A further four exchange visits took place this year, locally and regionally, to share knowledge, experience and learnings on best governance and management practices. An exchange visit for group 1 association members to visit Kenya is planned for Q3 to enhance learning on implementation of LMMAs and governance models. Further local exchanges are also planned for zone 3 associations to visit zone 1 and/or 2 over year 3.

3.3 Progress towards the project Outcome

Currently seven communities are supported (estimated 1200 fishers, target 1500) across two zones, including associations with 307 members (including associations currently formed in zone 2). Activities are set to start in zone 3 early Y3, achieving the target.

Four communities are actively implementing fisheries management measures in zone 1. 220ha of coral reefs are managed by local associations through temporary closures and a permanent no take zone (target 350 ha). The permanent no-take zone is now in place in zone 1, with discussions taking place on scaling up the initiatives towards a longer-term agreement with authorities (co-management/form of LMMA). Discussions on longer-term management are ongoing in zone 2.

386 fishers supported in livelihood activities (drying/smoking and agriculture).

Four exchange visits (two groups from zone 2 to zone 1, zone 1 to zone 2, Grande Comore), first national workshop (involving representatives from 17 communities across three islands, and partner organisations (AIDE, National Parks - Moheli/Shisiwani, Regional and National Directorate, INRAPE National Research institute), developing the learning network.

3.4 Monitoring of assumptions

Assumption 1: Newly-engaged communities work together to implement collective marine management actions.

Comments: Assumption still valid, but proved a bit challenging this year. Support to new communities was initiated at the beginning of year 2, and fisher representatives in the different communities sharing marine resources show interest in fisheries management. There are some governance challenges however, especially in effectively including all stakeholder groups in the different communities. We have made good progress on this over the last year, achieving recently an agreement with the stakeholders currently holding power to create a committee that will include representatives of the different stakeholder groups and oversee fisheries management initiatives in the area.

Assumption 2: Livelihood improvements are not negated by natural disasters or other events out of project control.

Comments: Assumption still valid. There haven't been any natural disasters, and the COVID-19 pandemic hasn't had a negative impact on livelihood improvement activities.

Assumption 3: Other donor-funded marine management projects respond to outreach and collaboration efforts.

Comments: Assumption still valid. Communication efforts around activities have ensured a positive collaboration amongst existing projects, especially during bi-monthly meetings and ensuring government support. Outreach efforts were initiated from the start of new projects (FAO and Oceans5), which ensured effective collaboration.

Assumption 4: Targeted reefs do not suffer heavily from extreme heating or other climatic events.

Comments: Assumption still valid. Reef monitoring allows assessment of impact from climatic events. There were no extreme heating or climatic events in the reporting period.

Assumption 5: Unsustainable and illegal fishing practices do not increase thus negating the benefits of local management initiatives.

Comments: Assumption still valid (see indicator 1.3): based on catch monitoring results in zone 1, 75% of reef gleaners are abstaining from destructive fishing techniques, and are using a sustainable wooden spear instead of the destructive metal rebar to catch octopus compared to 40% at the start of the project in October 2020 and 64% at the end of year 1. In zone 2, catch monitoring results during reopening events showed 80% of reef gleaners used the wooden spear instead of the metal rebar (no baseline data as catch monitoring started after a temporary closure).

Assumption 6: Community members involved in monitoring engage in interpreting and presenting monitoring data for fellow community members.

Comments: Assumption still valid. In zone 1, 25 association members have been trained in understanding and presenting catch monitoring results, and two fishers have presented boat catch results to their peers. Further sessions are planned, including in zone 2 where training has not started yet.

Assumption 7: No significant destruction of crops by natural disasters.

Comments: Assumption still valid. There have not been any natural disasters impacting crops this reporting period.

Assumption 8: Sufficient local leadership and cohesion exists within the target communities for local management to be developed successfully and respected.

Comments: Assumption still valid. In zone 2 there have been governance challenges, however, good progress has been made in strengthening local leadership (e.g. creating women

associations) and fostering inclusive governance (agreement on creating an inclusive committee for marine management in the area).

Assumption 9: Partners see the benefits of sharing experiences.

Comments: Assumption still valid. Participants in the national workshop organised at the end of February, including representatives from eight institutions involved in fisheries management, alongside fisher representatives, stated their appreciation in sharing their knowledge and experiences (see supporting document 3, Workshop on temporary fisheries closures in Comoros).

3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation

The project is strongly aligned with the Programme of Work on Marine and Coastal Biodiversity by promoting full participation of communities in the establishment and maintenance of marine protected areas in line with decision VII/28 on protected areas.

The project's activities have so far made progress towards a positive impact on biodiversity and poverty alleviation. We have been working with fishers to manage biodiversity with the goal of reducing poverty and protecting preferential access rights, establishing three further temporary fishery closures across seven communities and a permanent no-take zone in one coastal area. The temporary closure has positively impacted fishers' livelihoods by doubling their usual catch compared to before the closure. Anecdotally, community members have voiced appreciation for agriculture support during these temporary closures, and have gained more profits from their cultures.

The consultancy on value addition opportunities allowed us to prioritise effective low-cost strategies adapted to our context. Demonstrations of drying and smoking techniques have taken place for 37 participants, followed by a tasting event. Attendees stated their appreciation of the product. After a pilot phase with one fisherwomen association, and capitalisation, the approach will be replicated in other communities. This activity can increase fishers revenue and develop business capacities, whilst being targeted at association members responsible for fisheries management (as incentive to fisheries management).

By reinforcing the effective management of marine resources through community management and by taking practical actions to rebuild fish populations and protect key habitats, in particular coral reefs, the project is on its way to help protect critical ecosystems and ensure local, low-income communities are able to benefit sustainably from biodiversity; helping Comoros achieve CBD Aichi Biodiversity **Targets 6** (sustainable fishing), **10** (minimising climate change impacts), **11** (effective conservation of biodiversity and ecosystem services) and **14** (safeguarding health, livelihoods and well-being).

The project responds directly to targets identified in the Comoros' National Biodiversity Strategy and Action Plan submitted to the CBD in 2016. The approach and objectives contribute to all five of the key targets: reduce the causes of biodiversity loss through integration into productive sectors; reduce direct pressures and encourage sustainable use; conserve ecosystems and species; and reinforce implementation through participatory planning, knowledge management and capacity building.

4. Project support to the Conventions, Treaties or Agreements

The project is contributing towards the three main objectives of the Convention on Biological Diversity (CBD) (ratified by Comoros in 1994) as planned, in particular Articles 8 (In-situ Conservation), 10 (Sustainable Use of Components of Biological Diversity) and 14 (Impact Assessment and Minimizing Adverse Impacts). We are working towards Articles 8 and 10 through development of fisheries management measures, including those that reduce use of destructive fishing techniques, and implementing a no-take zone to preserve coral reefs in the long-term. We are working towards Article 14 through catch and reef monitoring programmes in both zones 1 and 2, planning to start in zone 3 early year 3. Results from monitoring will be used to assess the state of marine resources, allow for adapting and informing management

measures in locations where they are most needed (e.g. by identifying key biodiversity areas), and evaluate the effect of management initiatives to ensure a positive impact on marine biodiversity.

Regular communications are maintained with the Comoros CBD focal point, Abdouchakour Mohamed, for instance by sharing all reports produced in collaboration with Dahari, including national workshop reports.

5. Project support to poverty reduction

The project is based in the most low-income and most populous island of the Comoros, with a rapidly increasing population that depends on dwindling fish stocks and farming for food security and income.

The project targets both reef cleaning and boat fisheries, aiming to improve the livelihoods of 1500 fishers. Reef cleaning is practised mainly by women who are entirely dependent on accessible, shallow coral reefs, which are vulnerable to climate change. They often use destructive fishing techniques such as poison or metal rebars to fish for octopus. Boat fishing is practised mainly by men, who often use destructive fishing techniques such as nets with small mesh size.

The project works towards poverty alleviation by supporting alternative livelihoods and encouraging families to diversify their income, such as so far training 56 fisherwomen in fish drying techniques. We trained 323 fishers in agriculture techniques, such as crop rotations and associations of different cultures or strategies to prevent soil erosion, ultimately supporting yield improvement.

Specifically, by working with fishers to manage biodiversity with the goal of reducing poverty and protecting preferential access rights, the project fulfils general principle 4 of the Programme of Work. For instance, the implementation of temporary fisheries closures as in zone 1 increases the octopus catches (see Supporting documents 4a - Report of Activities Moya, 4b. Report of Activities Vassy), providing short-term benefits and engaging fishers in the development of longer-term measures, such as a no-take zone with lasting impacts for biodiversity. Community-based measures ensure these initiatives are legitimate locally and will be enforced. We are also supporting communities in zone 1 to work with local authorities towards a multi-year agreement on temporary closures, to anchor those initiatives in local law for the mid-term and thus empower local associations in managing their fisheries resources sustainably.

6. Consideration of gender equality issues

Women in the Comoros are traditionally absent from resource management discussions where collective decision-making is dominated by men. Their interests are underrepresented and they often lack confidence to participate in male-dominated meetings. The project aims to empower women to play a more equitable role in resource management.

Due to the prevalent patriarchal structure and male dominance in Comorian society, we are ensuring that women participate in several initiatives, thereby promoting gender equity and equality in value-addition activities and improved agricultural practices, community consultations and are prioritised for participatory fisheries and habitat monitoring activities.

During this reporting period we have built local support, capacity and leadership for gender-equitable community-based marine management across the Comoros through supporting the creation of three women associations in zone 2, where women were not previously represented in decision-making around marine resources. In both coastal zones, we provided training in governance and management skills for 15 fisherwomen (all are members of local fishers' associations), and encouraged women's participation in meetings with 63% of women attendees at the meetings so far.

In zone 1, 18 fisherwomen members of local associations were supported in training their peers in using the wooden spear instead of the metal rebar to catch octopus. These sessions were a big success in empowering them in their role as leaders to reduce the use of destructive techniques. We're planning to replicate this method of training of the trainers in the other coastal areas.

Next steps include carrying out workshops to discuss representativity in decision-making and discuss gender differences and impacts in engagement in management discussions, especially with association members from zone 1 as we have already developed our relationship with them, allowing us to discuss such sensitive topics, with the aim of empowering women further in leadership positions.

7. Monitoring and evaluation

BV delivers projects using principles of adaptive management, as part of a cycle that moves from project design, implementation and monitoring, to reviewing results, and back to project design (adapting / revising strategy and plans). The outputs' and activities' contribution to the project outcome is detailed in a theory of change that we refer to at all stages in this cycle. Review happens at a range of frequencies, depending on the thoroughness of the review, with the broad strategy reviewed less frequently (usually every three years), and the day-to-day implementation of activities reviewed more frequently (at least monthly).

Project activities are implemented mostly by our partner Dahari, who we are working closely with to manage the project, including through M&E. Monthly meetings are organised with the field teams to review activities and discuss any challenges, and quarterly one-day sessions allow to reflect on achievements and challenges, as well as improvements and objectives for the next three months. In-country BV staff are connecting with Moheli National Park and overseeing communications between partners.

We use data from monitoring and evaluation activities (described below) to continually assess the rationale behind our theory of change, and the assumptions that underpin it, reviewing the relevance of the outputs and activities of the project. The indicators provided in the project proposal are outlined in the logframe.

Strengthening the capacity of Comorian community associations for marine and fisheries management is fundamental to achieving the project's objectives. This reporting period, 40 community members received training in fisheries monitoring, including the use of tried and tested smartphone-based fisheries monitoring and dashboarding systems.

As well as catch monitoring, which allows evaluation of outcome of temporary fishery closures, sharing result data with community members and discussions about how to improve management measures enable further development of management. 23 feedback sessions took place during the reporting period, and reports describing main outcomes and lessons learned from the temporary closures were shared with project partners and published on Dahari's website (see supporting document 4a and 4b).

Alongside catch monitoring, we conduct reef monitoring across 12 sites in the first two coastal areas. The methodology used follows the line transect method using visual census to record fish populations and point intercept to record coral and other benthic cover, in line with the regional guidelines on reef monitoring. This data has been used to designate the no-take zone location in the first coastal area, alongside fishers' traditional knowledge. In the second coastal area, a rapid assessment of reef ecosystems was conducted in May 2021 and the results were presented to discuss biodiversity hotspots with fishers. The outcomes from that participatory workshop led to confirming the final monitoring survey sites - and the subsequent data will be used in other workshops to refine the hotspot areas with fishers and decide on conservation measures.

Annual focus groups to evaluate project progress and any areas for improvement have been conducted in both zones 1 and 2 with 28 participants (see supporting document 5, Annual focus groups report (draft)). The results were positive with participants highlighting their appreciation of the various trainings to build their capacity to manage and lead associations, as well as the positive impact from support for alternative activities such as agriculture and fish

drying. Areas of improvement include developing further training and better planning of meetings (for example, to avoid Fridays and give more notice time).

The project proposed to develop and conduct household surveys to assess improvements in livelihoods as well as KAP (Knowledge, Attitude and Practices) surveys to assess awareness and perceptions/support towards marine conservation (supporting documents shared with the last annual report). During this reporting period, we have trained eight surveyors in zone 2, and completed the baseline for the two areas (1545 individual surveys) (a full report presenting baseline data will be shared once baseline data has been collected in zone 3).

Several challenges were encountered when putting into practice. The designed methodology and sampling approach proved challenging on several aspects: they are resource-intensive, requiring many days of training surveyors and actual surveying, as well as monitoring from Dahari team to check on surveyors' work (several people not doing their job properly, difficulties to recruit); errors were frequent due to complex questions, random responses, and low capacity of local surveyors.

Considering the situation, we have decided to adapt our sampling strategy by reducing the number of questionnaires, and also adapt the method by using focus groups for some questions instead of individual questionnaires. The Dahari team will conduct the surveys instead of external people, reducing the time needed to teach surveying skills and monitoring work. Moreover, we hired external surveyors to reduce answer bias, but respondents were made aware when introducing the questionnaire that Dahari / BV was at the source, so the effect was the same.

Considering including more direct questions about income increase or livelihood improvement, this is a very sensitive topic in the Comoros that has been tried without success by several organisations, including Dahari, with extensive experience in the Comoros. We therefore decided to ask qualitative questions about livelihood improvement, which allow more in-depth evaluation than quantitative data and are better received by community members. We are able to follow livelihood improvements via alternative activities, by monitoring prices of sold products for both agricultural produce and dried fish or octopus.

8. Lessons learnt

Overall, the project has made good progress in continuing to establish zone 1, and initiating support in zone 2. Exchanges between fishing communities and partners are underway, and we have seen good engagement from partners and fishing communities in sharing successes and challenges to improve community-based fisheries management.

The different socio-economic contexts and challenges (top-down governance, lack of consultation amongst stakeholders) between the three villages in the second coastal area required us to adapt our strategy rather than apply the model and learnings we had developed in the first area. While we believed we were effective in our scoping and preliminary analysis, this demonstrates that dynamics are often more complex than first presented and thus require more time and input than predicted. Solutions put in place include exchange visits between the two areas to better understand the context of their peers and how different associations function. Participants from the second coastal area were inspired by the functioning of existing associations in the first area and took onboard advice on managing temporary closures. We also launched conflict resolution workshops with the different fishers' associations to discuss challenges in the second coastal community and improve governance. All this learning will be incorporated when initiating activities in zone 3.

9. Actions taken in response to previous reviews (if applicable)

The issues raised in the last year's annual report were responded to via the following means, in collaboration with our implementing partner Dahari:

- [Response](#) following concerns raised after the previous annual report (September 2021)
- [HYR response](#) with [supporting report on octopus catch data](#) (October 2021)
- [Interim report](#) with [corresponding annexes \(October 2021\)](#)

Following this, we've started monitoring octopus sex again to improve results. No further actions.

10. Other comments on progress not covered elsewhere

Covered elsewhere.

11. Sustainability and legacy

This project is part of a long-term approach to build local support, capacity, and leadership for gender-equitable community-based marine management across the Comoros.

The use of community-led monitoring and periodic fishery closures have proven to be effective catalysts for wider local engagement in marine management in diverse Indian Ocean contexts, and this was also the case in the Comoros. For example, the temporary closure that took place in late 2020 inspired neighbouring villages to do the same, expanding community-based fisheries management across the Comoros.

Since the start of the project, six local and regional exchange visits with partners have taken place, and they have been successful in inspiring communities and partners to share experiences and engage in marine management. The exchanges conducted up until now and planned in the future, as well as the first national workshop conducted at the end of February, are providing the foundations needed to create a network of communities and partners (including government) motivated to expand the work beyond the project term. This will also ensure a sustained legacy of the project, with learnings and successes shared across the Comoros and replicated more broadly. Already, the government is engaging with women from the communities supported by Dahari who have experienced the closures, and invited them to other islands to share their experiences. Additionally, our partner, Dahari, is becoming an increasingly well known implementer in the field, helping to ensure future sustainability of this project.

The project exit strategy is still valid. The development of Dahari's capacity to support communities for marine management is a cross-cutting component of this project with the aim that they will be largely independent of BV's support by the end of the project. In the last reporting period, four new Dahari technicians have been recruited to support activity implementation. This goes together with an emphasis on local hiring and training, for instance with catch monitoring technicians and supporting associations, to ensure skills remain within the target communities.

12. Darwin identity

During the reporting period we have openly and transparently acknowledged the Darwin Initiative and the UK Government's funding. Logos have been used on reports shared with partners, awareness-raising materials to inform community members about management measures used during temporary closures and on signs along the coast to inform people about the no-take zone for instance. The logo has also been placed on the car funded through this project.

We also acknowledged the Darwin Initiative and the UK Government's funding on a [blog](#), which was then translated into French for the Dahari website and published in August 2021.

13. Impact of COVID-19 on project delivery

The number of cases has remained relatively low for the past year, except for a wave of COVID-19 cases around December 2021. Several measures are still in place, including a curfew from 1am to 5am, and recommendations to wear masks and social distancing in all public spaces and offices. Measures are barely enforced with a few police patrols.

In the Comoros, there is very poor healthcare infrastructure and lack of uptake of preventative measures, however, testing and results communication has improved over the last year and vaccination campaigns have been effective. Caution remains warranted and we closely monitor the situation with our partner Dahari.

The COVID-19 pandemic has caused some disruption to group events, such as awareness-raising events and training sessions, which were unable to take place due to restrictions on gatherings of people especially during a wave of infections at the end of 2021. As a result, we reduced activities during this period and postponed group events, without impact on the project work plans.

BV has policies and mitigation measures in place, and there are some restrictions to work and movement, and briefings required for staff. Dahari has strong guidelines in place that are reviewed regularly every week, and are in touch with the doctor in charge of the COVID-19 response on Anjouan for trusted information.

Effy Vessaz and Fanchon Wright, the two BV employees in the Comoros, are following the same procedures as our in-country partner Dahari; including limiting travel, wearing a face mask, and maintaining social distancing and careful hygiene.

14. Safeguarding

Please tick this box if any safeguarding or human rights violations have occurred during this financial year.

If you have ticked the box, please ensure these are reported to ODA.safeguarding@defra.gov.uk as indicated in the T&Cs.

BV places great importance on the rights of our partner communities, partner organisations, our beneficiaries and our people. We work with remote coastal communities where people often struggle with severe environmental, economic, and educational challenges. These challenges can heighten communities' vulnerability. For BV, safeguarding means protecting communities from the potential harm that arises from coming into contact with anyone working for or with us, or from our activities or our programmes. We have clear policies, procedures and governance in place that have been reviewed and updated every six months, and policies are updated every month with new training provided to the project team to ensure we provide a safeguarding framework that everyone who works with us is made aware of through induction and training.

We have a dedicated position within the organisation (UK based) to oversee Safeguarding and Health and Safety matters. We are committed to ensuring that our staff, partners and anyone working with us are fully aware of what safeguarding means, our policies and procedures - including reporting mechanisms. These policies include: Protection Policy for Children and Vulnerable Adults, Ethical Photography Guidelines, Terms of Reference for Safeguarding and Reporting Committee, Whistleblowing and Reporting Guidance Procedure, and our Code of Conduct. Our primary objective in safeguarding is to do no harm, and we take a zero tolerance approach to anyone who contravenes our policies.

15. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2021 – 31 March 2022)

Project spend (indicative) since last annual report	2021/22 Grant (£)	2021/22 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)	██████	██████	██	
Consultancy costs	██████	██████	██	
Overhead Costs	██████	██████	██	
Travel and subsistence	██████	██████	██	
Operating Costs	██████	██████	██	
Capital items (see below)	██	██	██	Only one laptop was purchased instead of 2 lower price ones
Monitoring & Evaluation (M&E)	0	0	0	
Others (see below)	0	0	0	
TOTAL	██████	██████	██	

16. **OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes**

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

The establishment of the first community-led, permanent no-take zone officially written into law in August. Discussions continue to take place on scaling up the initiatives towards a longer-term agreement with authorities (co-management/form of LMMA). A theatre play was organised during the ceremony for the officialisation of the no-take zone, highlighting benefits of the management initiative to 70 people.

Annex 4 Onwards – supplementary material (optional but encouraged)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the correct template (checking fund, type of report (i.e. Annual or Final), and year) and deleted the blue guidance text before submission?	✓
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	✓
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	✓
Do you have hard copies of material you need to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	✓
Have you involved your partners in preparation of the report and named the main contributors	✓
Have you completed the Project Expenditure table fully?	✓
Do not include claim forms or other communications with this report.	