



Darwin Initiative, Darwin Plus and Illegal Wildlife Trade Challenge Fund Covid-19 Rapid Response Round - Final Report

Due within two months of the end date of the Rapid Response Round project

(maximum 6 pages)

Project reference	CV19RR24
If linked with an ongoing project, please include that project reference here (e.g. IWT001)	25-024
Project title	Understanding immediate impacts of Covid-19 on coastal communities in Mozambique
Country/ies	Mozambique
Lead organisation	Zoological Society of London (ZSL)
Partner institution(s)	Associação do Meio Ambiente (Ama)
Start/end date of project	01.01.21 - 31.03.21
Which fund was this project relevant to?	Darwin Initiative
Grant value (£)	54,171
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1. Project Summary

This project filled critical gaps in our understanding of the socioeconomic and environmental impacts of Covid-19 on coastal communities (Bandar and Mecufi, see map below) in northern Mozambique. We focused on enhancing knowledge around key pillars including governance and co-management of marine resources, community behaviour, and biological impact on fisheries to inform the knowledge base and strategies for long-term community resilience. This project built on data already collected by the Our Sea Our Life (OSOL) project, funded by Darwin Initiative (25-024). The data show the development of coping mechanisms by communities to increase their resilience to shocks and support recommendations for scalable community-based solutions that can be applied in the short term to assist current beneficiaries of the OSOL project (Bandar and Mecufi's communities).

More specifically, the OSOL project is already working to improve mechanisms for participation and empowerment (women/vulnerable groups), expand local economies (through Village Savings and Loan Associations, or VSLAs) and enhance food security, to create enabling conditions to protect marine biodiversity and decrease multi-dimensional poverty. This Rapid Response project specifically focused on investigating multi-dimensional well-being, livelihoods, marine resources and co-management and the coping mechanisms of Bandar and Mecufi's communities through the national and international restrictions relating to the State of Emergency brought about by the COVID-19 pandemic in March 2020 for Mozambique. By addressing the impacts of shocks to the existing mechanisms put in place under OSOL (Darwin 25-024), the project introduced responsive and sustainable solutions that are self-supported and therefore in line with the existing OSOL exit strategy. The project works primarily through Mozambican

members in group 1; male VSLA members in group 2; different female occupational groups in group 3; different male occupational groups in group 4; CCP (*Concelho Comunitário de Pesca*/Fisheries Community Council) members, fishers and fish traders in group 5; and female mosquito net fishers and female aquaculture group members in group 6. The research was assessed and approved by the UniLúrio Ethics Committee prior to implementation of the focus groups (Ethics approval reference: 03/Fev/CBISUL/21). Furthermore, a workshop was organised with provincial authorities and CCP representatives (see Annex 6) to discuss the impact of Covid-19 on resource management and how it can be mitigated. For (ii), we analysed data collected three times a week from January 2019 to December 2020 through a system of collection and monitoring of fishing resources with mobile devices/smartphones, using the Open Data Kit (ODK) tool. The ODK is a toolkit that allows offline data collection, sharing, research and mapping via mobile devices. This system does not require much experience in identifying species by users, as it incorporates images, minimizing reading and writing. Therefore, in addition to solving the problems faced in the current process, ODK guarantees data integrity, minimizes data loss, time, and costs, and maximizes data availability. The tool contains information on fishing effort (number of fishermen, time of beginning and end of fishing activity), catch in kilograms (kg), specific composition of catch, fishing gear for sampling days, and fishing zones, in addition to the names of members of CCPs involved in each landing site.

OSOL's strong collaborative approach involves ZSL, Associação do Meio Ambiente (AMA) and UniLúrio with a history of working together through challenging logistical contexts. The project has strong technical and practical knowledge, including experiences gained from other Darwin projects. This means that all field implementers were already highly familiar with the broader project, its outputs and the analysis needed. This reduced potential for errors in collection and expedited analysis.

It appeared that the impacts of the pandemic on participants' wellbeing were intrinsically linked to the impacts on local livelihoods (see Annex 2). According to the focus group discussions, the pandemic had a greater impact on the economically active groups of the communities (adults, women in particular). The response of the Government to Covid-19 was also sometimes conflated by community members with district-level security measures related to the insurgency and armed attacks that were also ongoing further north. For example, the curfews, reduced opening hours of markets and restrictions to the movement of people after dark are mitigations for both situations but implemented as a response to Covid-19. As a result, Covid-19's impacts increased market price fluctuations and made business operations more difficult, effects that were coupled with increases in the costs of basic needs and food items (the cost of rice, oil and soap doubled with the pandemic) and job losses. As with impacts on wellbeing, these were exacerbated by the insurgency and recovery from other shocks (recent occurrences of cyclones, armed attacks, cholera outbreaks, malaria) in the region.

With the drop in household income people's ability to save was also negatively impacted. Although savings groups are widely thought to increase resilience to shocks through social, human and financial capital ([Walcott et al 2021](#); [de Hoop et al. 2020](#)) some savings groups had members leave or even disband. Focus groups attributed this to the insecurity impacting negatively on people's willingness to save. Although some VSLA members (Mecufi) reported choosing to 'share out' their savings earlier than the end of the cycle during the pandemic as mentioned above, VSLAs and the existing savings reportedly played a role in supporting members to overcome the difficulties described. Some VSLA members in Bandar were able to keep saving, and members from both communities refer to using savings to purchase food, to pay for labour services (eg. people to work in the 'machamba') and even to invest in and diversify small businesses (eg. purchase of wheat for the production and sale of bread; purchase larger amounts of merchandise to sell) during the pandemic. There were also references to the social fund (both contributing towards this during times when they could not contribute to savings; and resorting to this by some members in critical situations) and the importance of access to loans by some groups.

Regarding the biological impacts of Covid-19 (see Fig. 2 below and Annex 3), fish catches in the period before Covid-19 were lower compared to the year 2020, the period of the Covid-19 pandemic. Catch per unit effort (CPUE) increases in the Covid-19 period for Bandar and Natuco (near Mecufi) and decreases for Murrubue (near Pemba) and Mecufi. There were variations in *Covid-19 Rapid Response Round Final Report Template 2021*

catches during Covid-19 (2020) between the two periods, State of Emergency (April to August 2020) and Public Calamity (September to December 2020), with low catches during the State of Emergency and greater catches during the Public Calamity period, possibly due to the easing of measures and increased fishing activity. During the Covid-19 period, CPUE showed variations, with higher incomes per fisherman recorded in the period of State of Emergency, especially in the village of Natuco, and lower in the period of transition between the State of Emergency and Public Calamity.

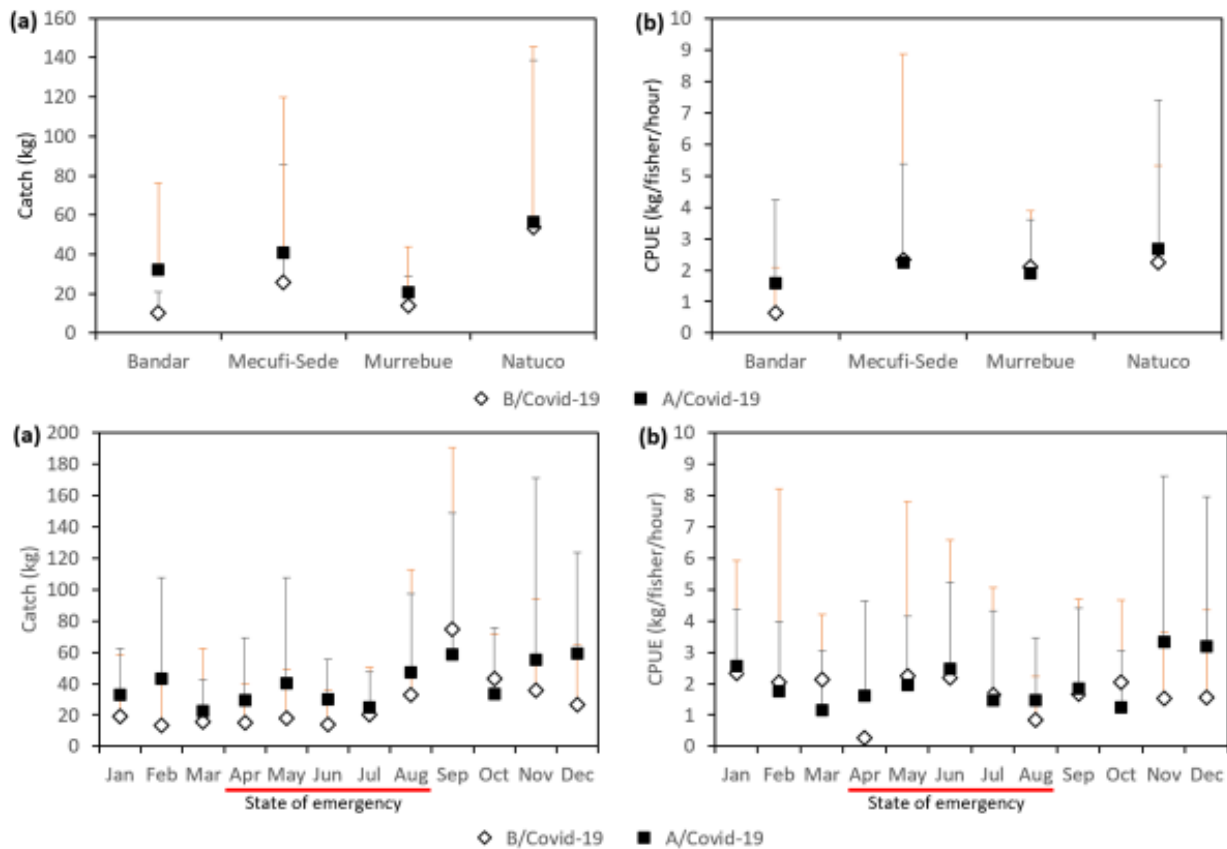


Fig. 2: Impact of Covid-19 on CPUE and catches between January 2019 and December 2020

The co-management of LMMAs was also affected (see Annex 2 and Annex 6). CCPs have continued to undertake their activities during the pandemic, albeit with a reduced frequency of meetings and participation of members. This has hindered the resolution of internal conflicts in the communities. The communities received many displaced fishers from the armed conflict zone, and these fishers were allowed to fish without any type of documentation, due to the insurgency, and ignored the normal procedure (where licences are issued by the governing entity and then presented to the CCP in each area to authorize fishing). Some groups in Bandar also reported a reduction in fishing activity, not necessarily due to the pandemic, but potentially linked to increased enforcement by the district authorities (linked to fishing with mosquito nets). LMMAs established (recently) in both communities were also cited as a factor that impacted fishing locations. In Mecufi, focus groups refer to a reduction in the fine amounts and penalties (or even their temporary cancelation) relating to the LMMA, with the aim to not further harm communities that already face considerable difficulties. They also mention that they have not had the opportunity to hold a meeting with the communities to talk about this issue. The focus groups of the Mecufi community cite that there was no support from the CCP to respond to the community's challenges.

The project organised an online workshop on 25th May 2021 entitled “The impact of Covid-19 on coastal communities” during which 29 participants from different organizations (including IUCN, Covid-19 Rapid Response Round Final Report Template 2021

FFI, ZSL, AMA) attended (see full list in Annex 4). This workshop presented preliminary findings of this study in coastal Mozambique and of other similar initiatives in the Philippines, São Tomé & Príncipe, Sri Lanka and India. It aimed to discuss challenges and lessons learnt by NGOs in supporting communities through shocks such as Covid-19 and inform future considerations, provide recommendations on mechanisms or policies, and solutions to strengthen our role in conservation. Important insights from the case studies came out, showcasing a wide range of impacts, both direct and indirect. There is a clear need for strengthening value chains and market access, as well as promoting equitable distributions of benefits, particularly for fisheries, but also for other products. Managing resources address the short and long term impacts of Covid-19 despite being considered as another layer of restrictions to the Covid-19 restriction measures. However, efficient resource management have a positive impact on people's livelihoods which strengthens the resilience of communities to cope and adapt to different types of shocks.

It was initially planned that the SurveyCTO platform would be used as a way to collect data for this study. However, the focus group discussions data collection method meant this was not the most appropriate method for using such an application in a short timeframe (3 month). Therefore, the team took detailed hand-written notes of the discussions as a familiar method. The project did however train in-country project partner AMA in the use of SurveyCTO. This will be taken forward as a useful tool (that can be linked across other projects) to monitor the performance of the VSLAs in the long-term which is also an indicator of how communities cope with periods of shock. Project partner UniLúrio converted the paper VSLA forms into the SurveyCTO format and delivered training (see Annex 5) to AMA staff members in using the platform, completing the forms, submitting and exporting the data for analysis.

In conclusion, Covid-19 is having significant impacts on livelihoods and wellbeing. This highlights the need to build community resilience and adaptive capacity tailored to the localised context through:

(1) improving the resilience and productivity of local food systems. Partnerships with governmental and non-governmental actors may be required to deliver support to smallholders to adopt climate-smart agricultural practices and varieties. Aquaculture, which is currently being promoted as a source of income, especially for women, can also play a role in strengthening local food systems by providing a sustainable alternative to capture fisheries;

(2) supporting savings groups (as a coping mechanism). VSLAs exhibit their potential role in supporting members through the difficulties brought about by the pandemic, beyond their known and proven benefits in building financial resilience and as a platform for information dissemination, and in this case to overcome socio-economic shocks, both directly to purchase first necessity items, or indirectly through small business development;

(3) diversifying livelihoods and strengthening value chains. Diversification can contribute to improve incomes, and this is important to enable families to build assets and savings to overcome economic stresses. Creative ways, through digital solutions for instance, of linking producers and buyers must be trialled to strengthen value chains;

(4) consolidating co-management (to protect resources & livelihoods). The frequency of meetings and participation of CCP members need to be maintained to address any arising issues within the reserves or the communities which require additional trainings in conflict resolutions for CCP members;

(5) guaranteeing basic needs through social safety nets. Mozambique has procedures in place to support local communities affected by natural disasters such as floods and cyclones, and these may provide a useful framework to deliver food relief and other types of support to local communities in a scenario of higher rates of infection and stronger restrictions on people's movement and contact. It is also important for government to work with local communities and community organisations as a means of developing contextualised responses suited to addressing local needs and vulnerabilities.

As a result, this project contributed to improve mechanisms for participation and empowerment for women and vulnerable groups, expand local economies (VSLAs) and enhance food security, to create enabling conditions to protect marine biodiversity and decrease multi-dimensional poverty. By addressing the impacts of shocks to the existing mechanisms put in place under

OSOL (Darwin 25-024), the project introduced responsive and sustainable solutions that are self-supported and therefore in line with the existing OSOL exit strategy under 25-024.

3. Lessons learnt

Delivering this multi-disciplinary project in three months has proved to be challenging as it involved multiple expertise and languages in a context that made traveling (to provide technical support to collect and analyse data) difficult due to consequences of COVID-19. As a result, we were not able to fully capture the gendered impact of COVID-19. But our collaborative way of working was essential to prepare and organize the focus group discussions and to ensure all steps in methodology were inclusive of all teams and for reviews and feedback. Finally, we are grateful to the flexibility of Darwin that accepted changes in the budget.

The training in methodologies (focus group discussion based on a questionnaire, data analysis and discussion, SurveyCTO) under this Darwin project was extremely valuable. The Our Sea Our Life programme intends to use these new skills and experience to conduct further research using similar approaches through further funding (from the SEEP Network - The Small Enterprise, Education and Promotion Network) for a longer timeframe of 12 months (until March 2022). We will explore our findings further as well as refine the data and results obtained and research specific areas highlighted by this project such as socio-cultural barriers for women to run bivalve aquaculture, the gendered-impact of COVID-19 and how VSLAs mitigate those.

We will carry on organizing international workshops that we found to be an interesting platform to discuss coping mechanisms strategies supported by practitioners against the impact of Covid-19 in rural communities so that they become more resilient.

This project has emphasised the need of a flexible approach for activities such as data collection in communities, and local and international travel (and associated budget and time allocations), during a period of time with ongoing changing circumstances and last-minute restrictions. In terms of inclusive and participatory data analysis (among all project partners) through a remote setting, this project has accentuated the role of technology in time saving and accessibility to all team members (SurveyCTO for central data access, online document sharing and feedback processes).

4. Other comments and feedback

n/a