



Darwin Initiative Main/Post/D+ Project Half Year Report (due 31 October 2016)

Project Ref No	EIDPO046
Project Title	Linking marine biodiversity conservation and fisher prosperity through marketplace innovation
Country(ies)	Peru
Lead Organisation	University of Exeter
Collaborator(s)	ProDelphinus (PD), Shellcatch, Pescadores Amigos de la Naturaleza (PAN), Ecodesca, Universidad Científica del Sur, San Jose municipality
Project Leader	<i>Brendan J. Godley</i>
Report date and number (e.g., HYR3)	<i>HYR2</i>
Project website/Twitter/Blog/Instagram etc	Website , Blog , Facebook , Twitter
Funder (DFID/Defra)	<i>Defra</i>

1. Outline progress over the last 6 months (April – Sept) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up to end September).

1.1 Port assessment trips (COMPLETED): As reported previously.

1.2 Identify & train in-port personnel (COMPLETED): As reported previously.

1.3 Determine port & network system needs (COMPLETED): Completed on schedule. Port and network system needs were first assessed in May 2015 and completed by the end of Y1. Consistent communications and port visits by PD staff with participating fishers have also allowed for rigorous testing of system components and dialogue to improve its functioning.

1.4 Acquire, install & test monitoring systems (COMPLETED): As reported previously.

1.5 Test traceability monitoring (COMPLETED): Traceability monitoring began in March 2016 and continues. A total of 139 sets have monitored. Monitoring system proves to be effective, with > 90% detection rates of elasmobranch, 63% of sea turtle bycatch detected and 67% of cetacean bycatch detected (Figs. 1 & 2). A trial product shipment was completed in June 2016 indicating that the product transport system was operational (Fig. 3).

1.6 Catch to market system operational (UNDERWAY): Fishing operations of five vessels are being monitored with the Shellcatch VMS system. PD is working with end-users to build a consistent market for products brought in by the participating vessels. Additional transactions planned for summer fishing season (Dec 2016 to Mar 2017).

1.7 Users trained in system operation (UNDERWAY): Core training of PAN fishers, port personnel in product monitoring and use of the camera system completed. In June 2016, both fishers and port personnel were trained in port to market shipment procedures. Additional training refreshers/updates will be scheduled for the coming months as necessary.

1.8 Project reporting to partners & stakeholders, etc. (AS SCHEDULED): Next scheduled reporting will be upon preparation of annual report and guidance documents scheduled for Mar 2017. Additionally, project partners are in regular (weekly/monthly) communication internally

and with stakeholders to detail project progress.

1.9 Student thesis projects assessing impacts (UNDERWAY): University of Exeter student D. Bartholomew completed his MSc in August 2016. Universidad Científica del Sur student A. Pasara is scheduled to present her thesis in November 2016 (Fig. 4). Also, 4 project-related peer-review manuscripts and 12 meeting presentations were submitted this reporting period.

2.1 Engage fishers to participate (UNDERWAY): PD has held 3 workshops with fishers in San Jose and 3 workshops in surrounding ports (Cancas, Cabo Blanco and El Alto).

2.2 ProDelphinus and student staff identified and trained (COMPLETED): As reported.

2.3 Fisher self-reporting on catch and bycatch (UNDERWAY): 12 fishing trips have been monitored and reported to PD by PAN fishers from 4 vessels from San Jose.

2.4 Acquire/fabricate mitigation & monitoring technologies (COMPLETED): As reported.

2.5 Develop monitoring protocols and monitoring forms (COMPLETED): As reported.

2.6 Onboard observer monitoring (UNDERWAY): Onboard observer monitoring is underway as scheduled by PD trained biologists. PD in-port personnel, E. Alfaro and A. Gonzalez participated in 2 fishing trips in Q1 of Y2.

2.7 Assessment and reporting of fisher participation, fishery impacts (AS SCHEDULED): A second assessment will be prepared, as scheduled, in Q4 of Y2. An interim assessment of fisher participation, target catch and bycatch mitigation trials was completed in Aug 2016.

2.8 Liaise with local & regional government on project progress (UNDERWAY): Project partners are in monthly communication with national government ministries. Fostering progress, project partner PD signed an MOU with the Ministry of Environment, June 2016. One meeting with local municipalities was also held during the reporting period.

3.1 Project introduction workshops with owners, chefs, buyers (UNDERWAY): Project introductions have been made to three additional restaurants: Fiesta, Mi Causita and La Picanteria. The last two are mid-range, neighbourhood restaurants. This is a good addition to the project as most of the current participants are from high-end restaurants.

3.2 Chef-fisher interchange workshops (UNDERWAY): This project activity is delayed, but underway. One interchange event was held in June 2016 in San Jose (Fig. 5). Two additional events (Lima & Chiclayo) are planned for Q3/Q4 of Y2. Delays in this activity were primarily due to the coordination challenges given the full schedules and frequent travel of fishers and chefs.

3.3 Identify owners, chefs, market participants (UNDERWAY): TOTTUS, Grupo Acurio, La Mar, and Maido, among others, have indicated they are prepared to receive products once the system is in place. La Mar and Maido received seafood products on our first port to market pilot trip, June 2016. We continue to seek additional participants as opportunities arise.

3.4 Development of awareness raising materials for end users (COMPLETED): Three new materials were produced during the reporting period (Fig. 6: 2 stickers, 1 pin), bringing the project total to 9 products. Additional materials may be produced as we deem helpful.

3.5 Monthly orders placed by buyers (UNDERWAY): This project activity is delayed but underway. While participating fishers and buyers have been identified, there remain challenges in identifying the fish products that can be supplied consistently. The initial product delivery in June was successful. Additional orders are planned for Q3 and Q4 of Y2 when the fishery can provide more reliable quantities of product that buyers require.

3.6 Project video production (COMPLETED): As reported previously.

3.7 Consumer smartphone application update (COMPLETED): The core tasks of this activity have been completed but the boVEDA app continues to be updated monthly with current closed seasons and as new fishery regulations are implemented.

2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable

of project activities.

The primary notable challenge currently is in establishing standing orders by end-users that participating PAN fishers can fulfil. Restaurants are interested in specific species that have to be delivered to them continuously. But, particularly during the winter fishing season (Mar to Nov), these species are caught only occasionally. To address this, we will focus on the summer fishing season (Nov to Mar) during which fishers can more readily supply the fish products that buyers request (e.g. dolphinfish, bonito). A second solution we continue to explore is to sell fish products to supermarkets (e.g. TOTTUS) that are more flexible in terms of the fish products and quantities they can receive. This dynamic has been an important lesson learnt by the project – the dynamics and products offered by a fishery vs the needs of the end users – and one to which we continue to adapt and work through. This does not imply affects to the project budget but has delayed our ability to establish standing monthly orders from buyers that are fulfilled by PAN fishers.

2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS:	No
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Formal change request submitted:	No
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Received confirmation of change acceptance	No
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3a. Do you currently expect to have any significant (e.g., more than £5,000) underspend in your budget for this year?

Yes No Estimated underspend: £

3b. If yes, then you need to consider your project budget needs carefully. Please remember that any funds agreed for this financial year are only available to the project in this financial year.

If you anticipate a significant underspend because of justifiable changes within the project please submit a rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget so please ensure you have enough time to make appropriate changes if necessary.

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

No.

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also be raised with LTS International through a Change Request.**

Please send your **completed report by email** to Eilidh Young at Darwin-Projects@ltsi.co.uk . The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g., Subject: 22-035 Darwin Half Year Report**

Appendix 1: Project photos from this reporting period



Figure 1 – The target species of the San José and Bayóvar fishery includes several shark and ray species: **(a)** thresher sharks (*Alopias* spp.), **(b)** bronze whalers (*Carcharhinus brachyurus*), **(c)** school sharks (*Galeorhinus galeus*), **(d)** broadnose sevengill sharks (*Notorhynchus cepedianus*), **(e)** Pacific angel sharks (*Squatina californica*), **(f)** hammerhead sharks (*Sphyrna* spp.), **(g)** smoothhound sharks (*Mustelus* spp.), **(h)** spotted houndsharks (*Triakis maculata*), **(i)** eagle rays (*Myliobatis* spp.), **(j)** pelagic stingrays (*Pteroplatytrygon violacea*) and **(k)** spinetail devil rays (*Mobula japonica*). Images captured using cameras developed by Shellcatch Inc. installed on the fishing vessels involved in our study.



Figure 2- Several species are also caught incidentally in the fishery: **(a)** dolphinfish (*Corriphaenus hippurus*) and common dolphins (*Delphinus* spp.), **(b)** dusky dolphin (*Lagenorhynchus obscurus*), **(c)** olive ridley turtle (*Lepidochelys olivacea*), **(d)** leatherback turtle (*Dermochelys coriacea*), **(e)** South American fur seal (*Arctocephalus australis*) and **(f)** Humboldt penguin (*Spheniscus humboldti*). Images captured using cameras developed by Shellcatch Inc. installed on the fishing vessels involved in our study.

Figure 3 – Procedures for test shipment of fish products from San Jose to Maido and la Mar restaurants, Lima, June 2016.

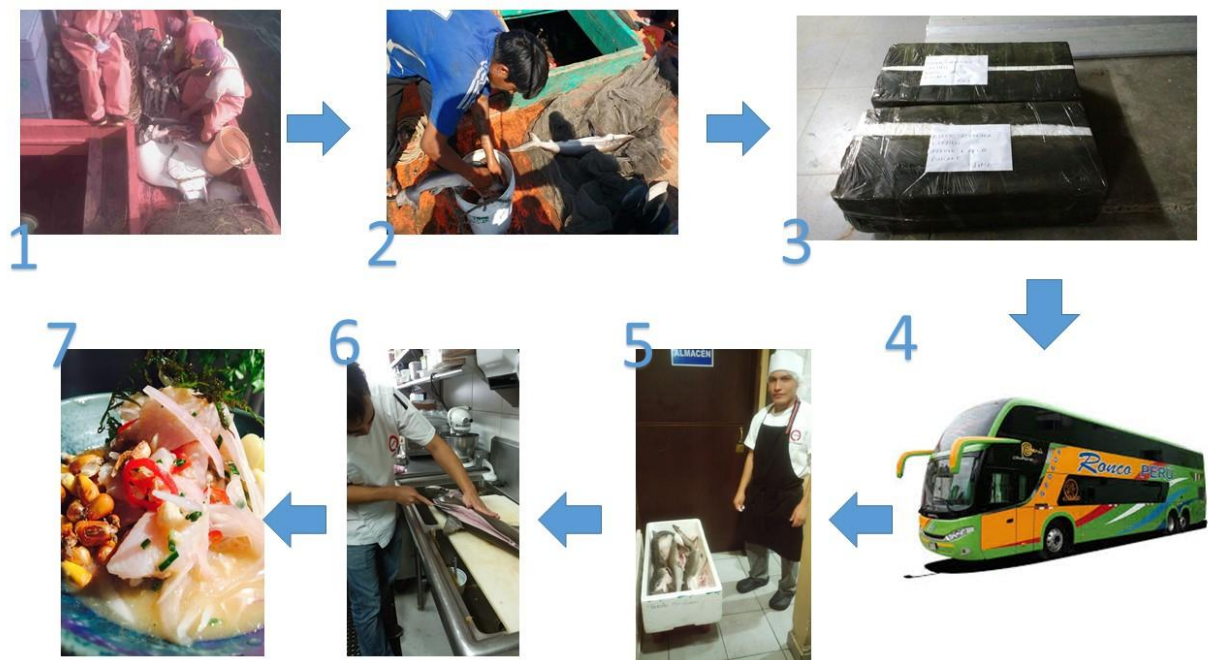


Figure 4 – Project biologist A. Pasara discussing her thesis research at Universidad Científica del Sur, Oct 2016.

Figure 5 – Chef-Fisher Interchange workshop, San Jose, June 2016.



Figure 6 – Examples of the educational materials produced this reporting period.

