Darwin Initiative: Half Year Report

(due 31 October 2014)

Project Ref No	19-020
Project Title	Responding to fish extirpations in the global marine biodiversity epicentre
Country(ies)	Philippines
Lead Organisation	Newcastle University
Collaborator(s)	Dr Margarita Lavides
Project Leader	Prof. Nicholas Polunin
Report date and number (eg HYR3)	31 October 2014: HYR3
Project website	

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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).

With the last social data gathered in Honda Bay (Palawan) in September 2014 this study of potential local disappearances of finfish species in five marine key biodiversity areas (the others being Lanuza Bay, Danajon Bank, Verde Island Passage and Polilio Islands) completed the fishers' knowledge part of the project. Generalized Linear Mixed Modelling (GLMM) was used during August-September 2014 to analyse the catch per unit effort (CPUE) trends incorporating several variables (age, decade, gear type, hours fishing, horsepower, site),the best models being selected using dispersion and the Akaike Information Criterion. A total of 65 finfish, 47 identified to species level, one to genus, 6 to family and 11 to local names only, were reported by fishers to have disappeared from catches between the 1950s and 2014. Five species common to all sites merit more attention based on the number of fishers who target or who opportunistically catch these species, number of zero catch reports and species intrinsic vulnerability index. Models showed that over the period bumphead parrotfish (*Bolbometopon muricatum*) CPUE declined by 93%, humphead wrasse (*Cheilinus undulatus*) by 82%, African pompano (*Alectis ciliaris*) by 66%, giant grouper (*Epinephelus lanceolatus*) by 82%, and mangrove red snapper (*Lutjanus argentimaculatus*) by 64%. These declines are consistent with the IUCN Red List which categorized *B. muricatum* and *E. lanceolatus* as Vulnerable and *C. undulatus* as Endangered. Results of this study and intrinsic vulnerabilities reveal that these species are nearing local extinction, posing a threat to the coral reef ecosystem because of their ecological roles. *B. muricatum* is important in bioerosion, while *E. lanceolatus*, *C. undulatus* and *A. ciliaris* are large predators which it is believed help to maintain ecosystem structure. In this data poor situation, fishers' knowledge of abundance trends may usefully inform the conservation status and National Red Listing of marine finfish species.

The study has contributed information to the Action Plan to Prevent Species Extinction, which is an Annex to the Philippine National Biodiversity Strategy and Action Plan (NBSAP). Two other proposals for additional funding of the underwater work (Ocean Park Foundation, and PADI Foundation) having between unsuccessful, a proposal has been submitted to the Conservation Food and Health Foundation and two others are planned.

In June 2014, Dr Margarita Lavides, Erina Pauline Molina and Gregorio de la Rosa Jr presented an oral paper at the Asia-Pacific Coral Reef Symposium (Kaoshiung, Taiwan).

In April-July 2014, business planning, and feasibility and marketing studies for the sustainable

livelihood project were carried out.

In August and September 2014, training in social enterprise and marketing was given to KAAMPAKA. Groundwork was done with local government officers in Cortes (Surigao del Sur) and the regional Bureau of Fisheries and Aquatic Resources was done in preparation for further training and start-up operations of the KAAMPAKA Premium Fish Products social enterprise project.

In August and September 2014 proposals for additional funding of the livelihoods project were submitted to the Peace and Equity Foundation and Foundation for Sustainable Society Inc (FSSI). The paper due as milestone M3 has been drafted and is being developed.

2a. Give details of any notable problems or unexpected developments 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.

No new problems of note or unexpected developments.

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:	Yes/No
Formal change request submitted:	Yes/No
Received confirmation of change acceptance	Yes/No

3a. Do you currently expect to have any significant (eg 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 as it is unlikely that any requests to carry forward funds will be approved this year. 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 and would like to talk to someone about the options available this year, please indicate below when you think you might be in a position to do this and what the reasons might be:

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

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 eg Subject: 20-035 Darwin Half Year Report**