

Darwin Initiative Main/Post/D+ Project

Half Year Report

(due 31st October 2017)

Project reference	23-020
Project title	Sustaining biodiversity, livelihoods and culture in PNG's montane forests
Country(ies)/territory(ies)	Papua New Guinea
Lead organisation	Wildlife Conservation Society
Partner(s)	Oxfam International, IRRM, KGWan, NARI, Miruma community
Project leader	Ambroise Brenier
Report date and number (e.g., HYR3)	HYR2
Project website/blog/social media etc.	www.wcspng.org @WCSMelanesiaSci www.facebook.com/wcspng

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).

Of the 14 project activities as of 30 September 2017, three have been achieved (equalling or bettering their indicator), nine are underway, and two have yet to be started.

In follow up to the annual report review WCS has made a substantial effort to increase the visibility of the Darwin Initiative especially via the frequency of tagged social media releases, and the use of the Darwin Initiative logo on project materials (i.e. posters, teacher support materials, information sheets, and nurseries). A formal change of Change Request form accompanies this report to formally request changes first outlined in the annual report, and raised by the review.

Progress on objectives and activities below:

Objective 1: The introduction and uptake of improved gardening practices in three communities and an increase in the duration and life of garden areas

Activity 1.1: Increase the number of new gardening techniques that are taken up by communities in the project area

Underway. Delays were faced (please see section 2a for details) over the reporting period. Assessments of all three communities have been subsequently completed by NARI in October 2017. Training in improved agricultural techniques with model farmers is scheduled to occur over next 6 months.

Activity 1.2: Ensure activities are established in >300 households using new gardening techniques by March 2018

Underway. NARI is currently developing the training plan in advance of course delivery. WCS agricultural and community engagement officers (in collaboration with community based organisation agricultural officers) will ensure that full scale roll out of techniques occur over the next 6 months.

Additionally, as part of the WCS commitment to building local (CBO) agricultural capacity WCS sponsored Steven Yandime (KGWan) and Topyy Sundu (IRRM), and two WCS staff to attend an Agricultural Extension Officer conference held in Goroka (10-12 September 2017). The purpose of such training was to familiarise the two CBO leaders and WCS staff with regional issues, local approaches, and agricultural techniques to facilitate the eventuate roll out of the

NARI training. Additionally, the conference provided an opportunity for the attendees to network with key government agencies (especially NARI), other community groups and NGO partners. This later opportunity was particularly important given the disruption caused by the national election.

Activity 1.3: Promote new techniques to ensure the duration of active garden areas is increased by 30% by March 2019 in comparison to baseline information from past practise

Underway. Baseline survey completed within first year of project. WCS using annual perception surveys occurring Oct-Nov to monitor changes in farmer food security.

Objective 2. Introduction of new market crops for income generation, and introduction of pest and drought resistant varieties for subsistence use within all three communities

Activity 2.1: Work with Oxfam and local partners to promote a 50% increase in the number of marketable crops in gardens

Underway. WCS is awaiting reports from the recent NARI assessments and Oxfam International (due 30 Oct 2017) to identify which marketable crops to pursue.

Activity 2.2: With the support of NARI introduce least 2 new pest and/or drought tolerant crop varieties

Underway. WCS is awaiting reports from the recent NARI assessments, and more importantly Oxfam International on the effectiveness agricultural initiatives in Gembogl district undertaken in response to the 2015 El Niño event (due 30 Oct 2017) to identify which marketable crops to pursue to identify suitable pest and drought resistant crops for propagation.

Objective 3. Nursery practices for native tree species tested and established in two communities and active planting of areas with native species by the project end

Activity 3.1: Develop propagation methods for at least four native tree species in nurseries

Achieved. WCS has successfully devised and implemented propagation methods for 5 timber species which are now in the seedling stage: *Fragraea berteriana* (1,609 seedlings), *Causarina equisetifolia* (190 seedlings), *Causarina oligodon* (235 seedlings), *Araucaria cunninghami*, (22 seedlings), and *Castanopsis acuminatissima* (9 seedlings). Three tree crop species have also been successfully propagated: *Ficus damaropsis* (88 seedlings), *Ficus copiosa* (1,333 seedlings), and *Pandanus julianetti* (252 seedlings). An additional two timber species are also undergoing germination trials (*Dacrycarpus* sp., *Cryptocarya* sp.).

Activity 3.2: Introduce the planting of native tree species in place of exotics into land use plans and ensure over 100 ha of land planted with native trees

Underway. WCS has worked with the Miruma community and built two permanent community nurseries. At the KGWan nursery (Danbagl) 1,653 native seedlings are being reared while at the Womkama nursery 688 native plants have been already planted into the community. At the WCS nursery over 3,738 seedlings are currently being reared with the first cohort of 235 *Causarina oligodon*, poised to be planted into the first experimental community woodlot. Land use planning activities will occur over next 6 months.

Objective 4. Sustainable use of existing forest stands within remaining areas of native forests and planted areas of exotic trees

Activity 4.1: Work with local CBOs to reduce the number of native trees harvested compared to number of exotic trees harvested from already existing forest stands

Underway. Estimates of wood volume (standing stock) underway for village plantations. Sales of timber being recorded as part of perception surveys.

Activity 4.2: Ensure more than 500 hectares under sustainable forestry practices as compared to baseline by March 2019

Not yet started. Land use planning activities will occur over next 6 months. WCS in partnership with Oxfam International will be developing a training course in integrated land use planning for the project communities in December 2017. Participatory land use planning scheduled for 2018 will identify the exact forest areas to come under management, after which tailored training will be given to the communities to improve the management of those specific areas.

Objective 5. Capturing and passing on traditional ecological knowledge on forests and threatened species

Activity 5.1: Produce school curricula capturing local ecological knowledge in 3 primary schools in the project area by September 2017

Achieved. Supplementary curriculum support materials (7 posters combined with teachers guide and lesson plans) have been developed and printed for the Upper Primary “Making a living” syllabus.

Activity 5.2: Measure an increase in the number of school children that learn about their local culture and traditional ecological knowledge by March 2019

Not yet started. Baseline monitoring of student knowledge is scheduled for late November 2017 prior to the introduction of the new curriculum support materials.

Objective 6. Minimizing impacts on hunted species by preserving local costumes and reviving traditional tambu (no hunting) areas.

Activity 6.1: Promote the uptake of improved preservation methods for fur and feathers in traditional costumes (termed bilas in tok pisin)

Achieved. A total of 485 bilas protection kits consisting of heavy duty plastic, butcher papers, camphor mothballs, and Tok Pisin instructions were distributed to the project communities. A further 644 kits were distributed during the 2016 Goroka show.

Activity 6.2: Work to increase the area or number of tambu sites created or re-established in the project area by March 2019, or other compatible traditional management methods

Underway. Surveying has revealed that tambu areas in the project communities are not used as a land use management mechanism. WCS will use the land use planning activities (see Activity 4.2) scheduled for the next 6 months to explore with the communities other equivalent mechanisms. Given the absence of traditional land management practices this activity will likely focus around protection of water catchment areas and potential designation as protected areas.

Activity 6.3: Conduct baseline and end threshold surveys for key biodiversity indicator species, and establish monitoring procedures for birds of paradise.

Underway. Monitoring completed at Danbagl. Womkama monitoring currently underway. Miruma monitoring scheduled for November 2017. GIS database set up to store sightings established. Each site currently receiving two weeks of monitoring incorporating: 1) distance sampling transects for birds, 2) camera trapping transects, 3) mist netting for birds, 4) village threshold surveys, and 5) hunter interceptions.

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.

Progress on field activities over the last six months has been slowed by the Papua New Guinea national election. After a fatal vehicle accident involving campaigners our partner communities in Gembogl communities advised WCS to suspended activities on 2 June 2017. This was issue communicated to the Darwin Initiative. The return of writs on 28 July 2017 should have heralded the end of the election period. However, politically motivated killings in Chimbu (e.g. <http://tinyurl.com/ycmbread>) lead to violent reprisals against the communities in Gembogl district. In a defensive response the Gembogl communities removed the flooring of the vehicle bridges which prevented all vehicle access into the district. The bridges were restored on 18 Sept 2017. WCS, having followed events closely was able to prepare a field team in advance and which accessed the district on the date the bridges first reopened. Both Gembogl community based organisations were able to continue working on their sub-granted activities over this period despite the lack of access from outsiders. Activities in Mirma (Eastern Highlands) were only suspended over the core election period, and were not substantially affected. During the election period WCS focused efforts on developing and finalising curriculum materials, building two nurseries in Miruma and completing the distribution of ornament protection kits in Miruma

The ability of the National Agricultural Research Institute (NARI), the implementing partner for the agricultural component of the project, were most severely affected by the election, with their field activities only beginning as of 10 October 2017. As NARI is a PNG agency their ability to be responsive is somewhat hampered by the bureaucratic nature of the agency (e.g. the requirement that work plans are centrally approved by the head office). As they did not undertake field visits prior to election period the agricultural component of the work is currently affected by an accumulated delay of around 6 months. Now that field activities are underway WCS will be encouraging NARI to recover time through block scheduling of their training courses. Should NARI not show evidence of time recovery WCS will use the provisions in the WCS-NARI sub-grant (which control the release of funds based on performance reports) to improve compliance.

During recent wildlife monitoring at Danbagl it was revealed that the Danbagl community have been hand cutting a road through the northern portion of the forest in order to develop a vehicle transport route through to Eastern Highlands Province. The road appears to have been ill planned and undertaken: 1) without liaison with the provincial government, 2) without any engineering input 3) without consideration of recurrent costs, and with 4) little consideration of the viability of descent into Eastern Highlands province given the extreme gradients. The road will likely result in loss of forest, accelerate road-side forest degradation, severely damage a 500 ha alpine grassland, and result in over hunting of the wallaby population which presently inhabits the grassland. WCS will work with Oxfam, the provincial government, KGWan and the wider community to promote better decision making through the integrated land use planning training planned as part of Activity 4.2.

At the end of September 2017 a community guest house at the highest elevation WCS field site, owned by the Womkama community, was burnt down by disaffected youths unhappy with what they consider to be unfair benefit sharing by the local community based organisation (IRRM). This guest house was to be the staging post for wildlife monitoring in Womkama. WCS staff are currently undertaking wildlife monitoring at the site and are appraising the situation.

Despite large quantities of seed both WCS and our partner CBOs have failed to attain germination for the *Nothofagus* genus. This is possibly due to the seed being sterile (as all were collected from only a limited number of smaller trees at the end of the fruiting season) or as yet an unknown set of environmental circumstances being required to initiate germination. As *Nothofagus* spp. are the most valuable and widespread timber of the region the propagation of this species continues to be an ongoing priority for WCS.

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 (pre-election withdrawal from Gembogl)
Formal change request submitted:	Yes (please find attached to this report)
Received confirmation of change acceptance	No

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.

WCS has submitted a rebudget Change Request (accompanying this report). We are currently forecasting an underspend of £3,000 on travel costs while at the same time forecasting an overspend on operational costs. We are requesting this change as no international travel is planned for the 2017/18 year (previously budgeted for £3,000). Detail can be found in our change request.

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

WCS will be submitting a Change Request with regard to improving monitoring indicators and reallocating some funding between budget lines due to higher than expected operational costs and lower travel costs.

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. Additionally, if you were funded under R23 and asked to provide further information by your first half year report, please attach your response as a separate 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**