Darwin Initiative/Darwin Plus Projects
Half Year Report
(due 31st October 2020)

Project reference	26-009
Project title	Enhancing wetland resilience for improved biodiversity and livelihoods in Cambodia
Country(ies)/territory(ies)	Cambodia/Vietnam
Lead organisation	Wildfowl & Wetlands Trust (WWT)
Partner(s)	BirdLife International, Cambodia Programme (BirdLife) Department of Freshwater Wetland Conservation (DFWC) NatureLife Cambodia (NLC) Cambodian Rural Development Team (CRDT)
Project leader	Tomos Avent
Report date and number (e.g. HYR3)	HYR2
Project website/blog/social media	N/a

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

Output 1: AP, BPL and the wider CLMD wetland landscape are better understood and showcasing best practice local adoption of Ramsar recommendations and tools.

Fieldwork for Rapid Assessments of Wetland Ecosystem Services and biodiversity assessments is underway at priority sites in the CLMD and this element of the project remains on schedule. Transboundary Ramsar Management Effectiveness Tracking Tool workshops are on hold due to international travel restrictions. If travel is still restricted early next year then we have developed plans to run R-METT workshops for the two Vietnamese sites remotely. We will still go ahead with the R-METT workshops for the two Cambodian sites, AP and BPL, but we would have to run these without our Vietnamese colleagues. One of the multiple rationales for this element of the project was to build lasting transboundary networks. We will continue to explore ways to build these networks remotely, most likely via a remote workshop to compare R-METT results at the end of the process, discussing common challenges and approaches, and planning further collaborations. Fortunately we were able to hold an expert working group workshop at AP early in Y1 of this project which included our Vietnamese counterparts, so we have at least established the foundations of relationships for the future.

Dipwells, rain gauges and evaporimeter pans have been installed at AP and BPL and monitoring protocols completed to collect data on groundwater, rain, evaporation and water quality. Protocols are being developed to monitor floodwater levels and waterflow throughout the site, providing much enhanced baseline knowledge to inform future management.

Output 2: Protected Area Management Plans informed by a participatory zoning process are developed, endorsed by government, and implemented at AP and BPL, with local communities understanding and adhering to their regulations.

Zonation at BPL continues to progress steadily, with the Takeo Provincial Government tasked by the Cambodian Ministry of Environment to collect land tenure documents and settle any outstanding land tenure claims at the site before the site is formally zoned into Core, Conservation, Community and Sustainable Use zones. All biodiversity and habitat data was provided by WWT in Y1 of this project, so once land tenure is resolved the zonation should be agreed relatively quickly, although government formalisation is expected to take up to 12 months before the zonation is made official. A first draft of the BPL Management Plan has been completed, and will be finalised by the end of 2020, with scope to adapt once zonation is formalised by government so not to delay implementation for elements of the plan not impacted by zonation.

Fieldwork has been completed for the Vulnerability Assessment of Anlung Pring and a write-up will be completed and ratified by communities by the end of Y2.

Large gatherings were prohibited in Cambodia for a significant proportion of this reporting period, so our approach to education and awareness has had to adapt. We have developed mobile broadcasting systems for both sites, with key messages on site rules and regulations played through a mobile speaker system at key villages in June and August. The nature of the broadcasts, frequency and target areas were agreed by rangers, community chiefs and project staff. Posters have been installed in schools, and the project initiated World Migratory Bird Day celebrations in Takeo, becoming the first major environmental event since Covid restrictions on large gatherings were loosened. Sarus crane statues were erected in a public garden to mark the event and leave a lasting reminder of this flagship species of Cambodia's inundated grasslands.

Rangers have continued to patrol the sites throughout the last six months. Rangers have also received training on identifying, and safe intervention for, cases of wildlife poisoning, and have completed a study tour to Stung Sen Ramsar site.

Output 3: 1700 local people in AP and BPL are directly profiting from sustainable livelihood ventures that also reduce wetland degradation.

CRDT facilitated training courses on rice integrated pest management, efficient applications of inputs, direct seed sowing methods and efficient harvesting for market at Koh Tnoat, Chress and Koh Chamkar villages. A training manual on Rice Post Harvest (include training handouts) has also been developed to build the capacity to producer group members and allow spill-over training to other farmers in the area.

The project team have bought 24 tonnes of Tro-Nong rice seed from Koh Andet district to provide more suitable seed for sustainable farming methods. Of the 224 farmer group members, 211 members chose to use the seed in this first season, the others wishing to review the results of others before making the transition to this new seed, instead only focusing on new farming methods. The new seed was sown over 130.32 ha, with a further 19.57 ha of farmland waiting for further rain. Unfortunately, in the early wet season, farmers around the AP protected landscape area faced an extended drought, and 46.51 ha of the 130.32 ha did not survive this period, thereby decreasing the scale of our trial. The drought has caused a major challenge to this project, made especially dire by the temporary movement of people back from the cities during lockdowns, which put even greater pressure on the land.

Although members of the community fishery can still fish inside certain areas of BPL, the Community Fishery group itself does not presently have formal management rights. As mentioned in the previous annual report, when the Protected Area is formally zoned, the Community Fishery will be formally designated as the Community-based Natural Resource Management group, and at that point can regulate relatively autonomously. Despite this technical constraint, the long-established Community Fishery can still benefit from the business support that this project is offering. Within this project period, we have reviewed existing business plan options, and are working with community members to agree a route forward.

A community waste management group has been established and agreed a by-law and management structure, with two sub-groups; Waste Management Group, and Recycling Group. The recycling group are now developing proposals for small grants from the project to set up a recycling business and made craft from recycled materials. We plan to release a small grant in November and train this committee about financial management and monitor their business running.

Output 4: The extent and quality of biodiversity habitat and productivity of natural resources are increased at AP and BPL through community-based wetland restoration in core protection and sustainable use zones.

Restoration protocols for flooded forest have been developed with technical guidance from Conservation International (CI). The restoration will be implemented by the Community Fishery groups, and contracts for this work are in place. Seedlings are being grown in local community nurseries, with extra saplings available from a CI project in Tonle Sap if necessary. The nurseries were originally scheduled to be based in local schools, but as schools were closed due to Covid-19 for a key period of implementation, it was decided that we had to make alternative plans if we are to deliver the project on time. School students will however still be involved in the planting, which gives us hope that we will instil a sense of guardianship of these restored flooded forests.

Forty hectares of the invasive non-native *Mimosa pigra* have been cleared from BPL.

Creation of experimental eleocharis grassland regeneration plots is still in the early stages. The 16 hectares reported in the first annual report is being maintained and monitored. Protocols have now been developed for other experimental management regimes, and restoration will take place once the water subsides after the annual rains, which will be at the end of Y2 and start of Y3 of the project.

2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months (for Covid-19 specific delays/problems, please use 2b). Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

The Cambodian Lower Mekong Delta is currently experiencing one its worst droughts in five decades, and the current monsoon rains are not generating much hope of an improved outlook in 2021. Although the agricultural activities within Output 3 are technically on track, CRDT are becoming increasingly concerned that the severe drought will continue to have a major impact on rice yields. As reported in section 1, a significant area of rice plantation failed during the early stages of planting. Fortunately, the AP farmers went on a site visit early in this project to see similar low input techniques generating higher yields, so farmers have generally maintained high confidence in the approach, even during these difficult times. Efficiencies in decreases to expensive chemical inputs and new market opportunities will still be an important benefit to farmers, but we are concerned that we will not achieve a 30% increase in profit when comparing to a pre-drought baseline. We may submit a change request with ideas of more suitable measurements if required.

The drought has also decreased food availability for sarus cranes in AP and BPL, anecdotally affecting total numbers visiting the site, and the duration of these visits. Birdlife have recently launched an experimental activity to cultivate rice specifically for the crane to eat which may help in the short-term, which they are doing alongside CRDT as an externally funded add-on element of this project. As the entire region is suffering similar challenges, we are still confident that our indicator for sarus cranes is still relevant.

CRDT has struggled to find easy access to markets for Sustainable Rice Platform Rice. Although this rice could be sold at a premium in Phnom Penh, the transport costs from Anlung Pring to Phnom Penh would override any increase in price for the farmers. Although CRDT could cover this transport cost in the short-term, the project have decided that this would set a dangerous precedent for a financially unsustainable process, so we are exploring other market opportunities. Any changes to approach will be formally communicated to Darwin through a Change Request.

2b. Please outline any specific issues which your project has encountered as a result of Covid-19. Where you have adapted your project activities in response to the pandemic, please briefly outline how you have done so here. Explain what residual impact there may be on your project and whether the changes will affect the budget and timetable of project activities.

We have been relatively fortunate that Covid-19 has not forced extended gaps in this project, but we have of course experienced delays, and have had to adapt project activities to focus on the most efficient ways to deliver our outcome and outputs. The following changes have occurred:

- Transboundary R-METT workshops have been delayed in the hope that international travel restrictions will be lifted so that these workshops can be held as originally planned
- Schools were closed for the majority of this reporting period, only fully opening again in October. As mentioned in Section 1, this altered our schools seedling nursery project and environmental education programme, but adaptations were made (see Section 1)
- Education film show events were not possible due to restrictions on gatherings. Portable devices emitting audio messages replaced these.

2c. 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
Formal change request submitted:	No
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. Please DO NOT send these in the same email as your report.

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. N/A

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 DO NOT send these in the same email.

Please send your **completed report by email** to 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: 25-001 Darwin Half Year Report**