

## Biodiversity Challenge Funds Projects Darwin Initiative, Illegal Wildlife Trade Challenge Fund, and Darwin Plus Half Year Report

*Note: If there is any confidential information within the report that you do not wish to be shared on our website, please ensure you clearly highlight this.*

**Submission Deadline: 31<sup>st</sup> October 2022**

<b>Project reference</b>	28-015
<b>Project title</b>	Delivering public-private partnerships to benefit farmers and biodiversity in Sulawesi
<b>Country(ies)/territory(ies)</b>	Indonesia
<b>Lead partner</b>	Wildlife Conservation Society (WCS)
<b>Partner(s)</b>	Bogani Nani Wartabone National Park (BNWNP) Authority, PT Cargill, Forestry Agency of North Sulawesi Province, Forest Management Unit II Bolsel and Boltim, Research and Development Agency of Bolaang Mongondow Selatan District (Bappelitbangda), Manado State Polytechnic (Polimdo)
<b>Project leader</b>	Jeni Pareira
<b>Report date and number (e.g. HYR1)</b>	31 October 2022 HYR3
<b>Project website/blog/social media</b>	

**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).**

### **Overall project progress**

The project started in July 2021 and this report covers activities from April 2022 to September 2022. During this period, we have focussed on increasing project engagement with the key stakeholders (namely BNWNP authorities, Forest Management Unit II/FMU II authority, district government agencies, Agricultural Instrument Standardisation Agency, Watershed Management and Protected Forest Authority). Following the socio-economic baseline survey conducted in March to June, we engaged communities in the 5 villages to better understand the opportunities and challenges faced by farmers in implementing deforestation-free farming practices. This was done to inform the development and implementation of subsequent community engagement strategies, including the development of training modules for the capacity building of coconut farmers. We identified 19 potentials ‘key farmers’ as agents of change in the 5 pilot villages, considered as those best placed to assist community partners in developing farming demonstration plots and leading in the adoption of good agricultural practices (GAP).

## **Output 1.**

*Activity 1.1.* The landscape is critical habitat for many endemic and endangered species (including Anoa, Babirusa, Maleo, and Black-crested macaque). The BNWNP management authorities and WCS agreed to monitor these species (project biodiversity indicators). To better understand farming community conditions, we conducted a socio-economic survey, developing a questionnaire that includes various indicators related to agricultural activities, commodity prices, supply chain of agricultural products, wildlife hunting, non-timber forest product collection, demography, community rules for natural resource use, and support from external organisations.

*Activity 1.2.* We produced a forest change map for the landscape for the years 2015-2020, with projections for 2019-2050. Our flooding risk analysis showed that land cover change effected sedimentation flow and it is recommended that GAP/biodiversity-friendly agriculture practices (BAP) be implemented to reduce sedimentation. In March 2022, WCS disseminated the forest change and flooding risk analysis results to the Binerean Corridor Forum (BNWNP, KSDAE, FMU, Bappeda). Using these results, we registered farmers working in high-risk areas and who were willing to join the project. We have contacted communities in five villages (Mataindo, Mataindo Utara, Torosik, Adow, and Matayangan). In Year 2, we will map farmland boundaries to identify priority farmers to be supported to implement deforestation-free farming practices.

*Activity 1.3.* FMU II-WCS continued to conduct SMART patrols, collecting threat and wildlife data.

*Activity 1.4.* A farmer survey was conducted in the five pilot villages (Mataindo, Mataindo Utara, Torosik, Adow, and Matayangan) and administered to 332 people (201 men and 131 women).

## **Output 2:**

*Activity 2.1.* We continued to work with the project stakeholders. Discussions were held with the secretary of the Agricultural Agency Bolaang Mongondow Selatan (Bolsel) regarding increasing farmer capacity and agreeing to collaborate on developing a GAP training module. We visited a permanent nursery in the Watershed Management and Protected Forest in Tondano to collect information on the types and quantities of seeds<sup>1</sup> available and best suited for agroforestry and intercropping. With the Head of the Agricultural Instruments Standardization Agency/BSIP (Dr. Stevie Karouw), we discussed establishing a project partnership with BSIP Manado on coconut commodities in the project area. WCS invited BSIP to join a farmer capacity building workshop as a resource person/facilitator. The project is now in the process of developing a technical assistance cooperation agreement between WCS and the Agricultural Agency in Binerean.

*Activity 2.2.* WCS conducted Focus Group Discussions in the five pilot villages with 392 respondents (246 men and 146 women). The key findings are that farmers: have implemented intercropping in the past but it requires intensive assistance; are still using conventional farming techniques due to lack of funding and limited access to market; their income is unable to meet their daily needs; women participate by planting and selling nutmeg, clove, and chilli; plant-based pesticides are used instead of chemical pesticides. We will run a workshop on farmers' capability and capacity to support the management of the Tanjung Binerean Wildlife Corridor and BNWP Landscape. We invited multi-stakeholder partners such as PT Cargill (the main buyer of coconuts in the landscape), Polimdo, BNWNP Authority, Forest Agency of North Sulawesi Province, FMU II Bolsel and Boltim, Agricultural Agency of Bolsel, Bapelitbangda Bolsel, BSIP, Head of Binerean Corridor Forum, Celebica and key farmer groups. The workshop will discuss the dissemination

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<sup>1</sup> Seeds are jabon, cempaka, mahoni, nantu, durian, pakoba, matoa, duku, cinnamon, gmelina, gaharu, nutmeg, candlenut, ebony, tabebuaya, mangrove, ketapang kencana, soursop, rambutan, mango, coffee and avocado.

of GAP materials and development of a training module. We also visited farms in the Binerean corridor to observed to meet farmers and discuss conservation-livelihood issues.

*Activity 2.3.* We conducted field visits to Mopupungu, Pelangi, Bonotur, Paruntu, and the core area of the Binerean Corridor. We learnt that 40% (104 out of 265) of the community's farmland are located on steep land and some are on the riverbank, which are within Binerean Corridor. We held FGDs in Mataindo, Torosik and Matayangan villages to develop conservation agreements with these communities, including the application of GAP in the Binerean Corridor. As a result, 61 farmers signed conservation agreements and 5 farmer groups were established with 124 farmers (97 male and 27 female).

*Activity 2.4.* We assisted Polimdo to assess landscape agriculture, value chain and alternative livelihood opportunities in the five project villages. The Polimdo team interviewed respondents using purposive sampling. These interviews included the Sangadi (head of the village), representatives of farmers, collectors, government officials and other relevant agencies such as Bapelitbangda Bolsel, Agricultural Agency Bolsel. They found that coconut commodities are picked up or taken by collectors that usually sell them to large collectors, which are the company partners who hold a cooperation agreement with the community. The trend of copra price at the farmgate from last year to the present ranges from 2,000/kg to 15,000/kg. Several recommendations have been made based on the survey results including supply chain and value chain efficiency, knowledge training on coconut quality and quantity, post-harvest technology, coconut derivative product training, access to finance and the development of agrotourism.

*Activity 2.5.* We drafted the GAP training programme following a detailed community needs assessment. From discussions with the local community, we found that land legality, monoculture, pests and diseases, human-wildlife conflict and farmer organization were challenges to sustainable coconut production. We developed a draft module, with inputs from Cargill, BSIP, Agricultural Agency and others, consisting of natural resources management, coconut farming, agroforestry, wildlife protection and alternative livelihood. The concept of sharing space and agricultural cultivation approaches that are biodiversity friendly is a target for pest management in the area. Training will be delivered in line with the seasonal calendar.

*Activity 2.6.* According to the Polimdo study, coconut derivative products have enormous potential due to the market and relatively steady prices. There are many coconuts derivative products that can be developed, including: virgin coconut oil, coconut flour, coconut milk, biodiesel, coco fibre, activated carbon, charcoal briquettes and others. Communities in Adow requested a way to improve coconut oil packaging for improved marketed. Farmers in Matayangan, which produces traditional coconut oil, have difficulties with processing techniques, resulting in a non-durable product. WCS organized a FGD on ecotourism, with farmers from Torosik not viewing this as an option, leading to other livelihoods being explored.

### **Output 3**

*Activity 3.1.* We worked with the Binerean Corridor Forum members (including the Agriculture Agency of Bolsel, Head of Legal Bureau/Head of Binerean Corridor Forum, Head of Bolsel Regency, FMU II, PT Cargill Amurang, Polimdo, BSIP and BPDASHL) to discuss sustainable landscape activities and agree on introducing GAP to farmers using the project training module.

*Activity 3.2.* WCS and FMU II conducted 3 patrols over 50.3 km. Assistance was provided in accordance with an agreement between resort patrol officers, SMART data operators at the sector level, and WCS. Training was conducted at the SKW I Bitung office with four participants:

one resort officer, two sector level operators, and one WCS. Several issues were addressed and practised, including conversations regarding the paths that have been patrolled, the collaborative entry of data into the SMART application, evaluation of patrols and planning for future patrols.

*Activity 3.3.* Discussions were held with FMU II regarding communities farming plots located inside the production forest it manages. There are 4 forest farmer groups from Mataindo and Mataindo Utara in a social forestry scheme, which is awaiting further approval from the FMU. One goal is to restore degraded watershed forest.

*Activity 3.4.* The development of agroforestry demonstration plots aims to practise innovative agriculture/plantation technology, changing farmer behaviour to increase agricultural yields, intensification and diversification of yields that are environmentally friendly without clearing forests. Every three months, WCS monitors demonstration plots. In May, we identified that out of 180 trees planted, there were 20 candlenuts, 25 nutmeg, 10 matoa, and 5 durian trees that had died due to wild boar and domestic cows. In September, 52 trees (27 matoa, 10 nutmeg, 9 durian, and 6 nantu) were planted to replace 60 of the dead trees. An agroforestry demonstration plot (one hectare) has started being built in Mopopungu, Mataindo village.

*Activity 3.5.* Not applicable in this reporting period.

**2. 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.**

1. There was a change in our multi-stakeholder partnership administration, with several members being replaced. This required reinvesting in our relationship with these new members to ensure their commitment to the project.
2. Female farmer participation in agriculture provides important additional household income. This provides an opportunity to increase female participation in project workshops, trainings and other events.

**3. Have any of these issues been discussed with NIRAS-LTS International and if so, have changes been made to the original agreement?**

Discussed with NIRAS-LTS:  Yes/No

Formal Change Request submitted:  Yes/No

Received confirmation of change acceptance  Yes/No

Change request reference if known:

**4a. 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: £

**4b. 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 re-budget Change Request as soon as possible. There is no guarantee that Defra will agree to a re-budget 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.**

**5. Are there any other issues you wish to raise relating to the project or to BCF management, monitoring, or financial procedures?**

None to report.

**If you are a new project and you received feedback comments that requested a response (including the submission of your risk register), or if your Annual Report Review asked you to provide a response 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 NIRAS-LTS International through a Change Request. **Please DO NOT send these in the same email.****

Please send your **completed report by email** to [BCF-Reports@niras.com](mailto:BCF-Reports@niras.com). The report should be between 2-3 pages maximum. **Please state your project reference number, followed by the specific fund in the header of your email message e.g. Subject: 29-001 Darwin Initiative Half Year Report**