58Biodiversity Challenge Funds Projects
Darwin Initiative, Illegal Wildlife Trade Challenge Fund, and Darwin Plus

Half Year Report

It is expected that this report will be a **maximum of 2-3 pages** in length.

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: 31st October 2025
Please note all projects that were active before 1st October 2025 are required to complete a Half Year Report.

Submit to: BCF-Reports@niras.com including your project ref in the subject line.

Project reference	DIR30S2\1080
Project title	Building climate resilient communities and ecosystems in Eastern Indonesia
Country(ies)/territory(ies)	Indonesia, Rote Island
Lead Organisation	Wildlife Conservation Society (WCS)
Partner(s)	Ministry of Forestry (MoF)
Project Leader	Dr. William Marthy
Report date and number (e.g. HYR1)	HYR2: 1 April – 30 September 2025
Project website/blog/social media	N/A

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

Output 1. The assumption still holds true. The assumption remains valid. Stakeholders continue to engage actively in the Community–Government Forum, which fosters inclusive participation especially of women and supports open dialogue and joint problem-solving. Activities such as Village Action Planning (1.2), the farmer needs assessment (2.3), and community patrols (3.7) demonstrate strong collaboration. The Forum, established in Year 1, will continue to be strengthened to ensure it remains an effective platform for coordination and joint decision-making. All data-driven analyses of localized climate change impacts on the wellbeing of the three target communities have bee5n completed through the BNS, NRGT, and KAP surveys. Additionally, the establishment of NTT's first Community Government Forum (Collaborative Working Group) has strengthened collaboration and provides a platform for integrating findings into community planning and policy dialogue. The project's standard indicators are also still relevant, i.e. DI-D05**:** with 25 people supported to better adapt to the effects of climate change, and DI-B05: with 15 people increased participation in governance. **Activities 1.1–1.5** was completed in Yr 1, while **Activities 1.6 and 1.7** were implemented in an integrated manner through meetings and coordination activities under Output 2. During the first six months of Year Two, the project focused on implementing Outputs 2, 3, and 4, covering data analysis, livelihood enhancement, biodiversity monitoring, and preparatory actions for future implementation.

Output 2. The assumptions remain valid. Work has been ongoing in the three target communities to strengthen climate-resilient livelihoods and reduce multidimensional poverty for over 100 vulnerable households through farmer support, improved land use, and sustainable farming and livestock practices. Standard indicators for this output are also still relevant with DI-B03 (community management plan in the form of 3 village action plans established), and DI-B04 (3 livelihoods plans are available and implemented). Partners continue to support livelihood interventions that enhance community well-being, resilience, and farmers' access to financing beyond the project. Strong participation in **Activities 1.2, 1.5,**

2.3, and 3.7 demonstrates sustained local commitment and collaboration. Inclusive consensus-building at the community level remains effective, enabling the formulation of actionable Village Action Plans (**Activity 1.2**). The project also continues to strengthen farmers' capacity to respond to new training and livelihood opportunities. The project is now expanding its reach beyond the initial Papadak farmer groups to include other community members who are interested and motivated to improve their livelihoods through WCS-supported interventions. **Activity 2.1 and 2.2.** Between June and July 2025, the project team analysed data from the Basic Necessities Survey (BNS; to measure community wellbeing and relative wealth), Natural Resource and Government Tools (NRGT; to evaluate how natural resources are governed and managed), and Knowledge, Attitudes, Practices (KAP; to measures people's knowledge, attitudes, and behaviours toward climate change issues and conservation of *C.mccordi*) surveys. Data cleaning and validation ensured accuracy and comparability across datasets. Preliminary analyses identified trends and gaps, leading to summary tables and partner discussions to guide **Outputs 3 and 4**. The wellbeing index in target villages (0.51 ± 0.01 SE) was slightly lower than in control villages (0.53 ± 0.01 SE), but the difference was statistically insignificant ($p > 0.05$). The control villages, which represent comparable communities not yet receiving direct project interventions, serve as a benchmark to assess the project's impact over time. The wealth index also showed no significant difference between intervention (IDR 28.9 million ± 1.59 million SE) and control (IDR 30.39 million ± 1.41 million SE) villages, indicating comparable socio-economic conditions **(Fig.1, Table 1)**. KAP survey findings showed that 65% of respondents in intervention villages had little or no understanding of climate change impacts compared to 56% in control villages. Awareness of the Rote Turtle was higher in intervention villages (72%) than in control villages (45%), demonstrating the positive influence of localized conservation outreach but highlighting the need for continued awareness efforts (**Fig.2)**. **Activity 2.3, 2.4, and 2.5.** A farmer needs assessment was conducted through surveys and Participatory Rural Appraisal (PRA) in Daiama, Daurendale, and Maubesi villages. On May 29, 2025, twelve farmers in Daiama developed a technical plan for Integrated Farming Systems (IFS) based on the Village Action Plan (VAP). The IFS integrates crop cultivation, horticulture, fruit trees, fodder, and livestock management to strengthen climate resilience. Fifteen families committed to participate, each managing around 0.1 Ha of land near water sources **(Fig.3).** Due to hard soil conditions, tractors were used for land preparation, and farmers agreed to cultivate short-harvest vegetables chilies, tomatoes, leafy greens, cucumbers, and eggplants, on a rotational schedule to ensure stable income. Follow-up meetings in Daurendale and Maubesi refined local implementation plans. In Maubesi Village, the Lake Peto ecosystem was identified as essential for both livelihoods and turtle conservation. On July 30, 2025, local traditional institutions *Manosongo* and *Manoholo* as lake owners agreed to integrate horticultural and conservation efforts and share patrol duties, reinforcing customary governance and co-management systems **(Fig.4)**. **Activity 2.6.** A series of capacity-building activities were implemented to strengthen farmers' knowledge of organic and climate-resilient farming. Training on Bokashi organic fertilizer was conducted on July 1, 2025, attended by twelve small-scale farmers who learned to produce fertilizer from local materials. Subsequent nursery training covered seed selection, soil mixtures, watering, and seedling care **(Fig.5)**. Hands-on On-the-Job Trainings (OJT) followed, covering land preparation, soil pH testing, transplanting, pruning, organic fertilization, and pest control using yellow traps and turmeric-based organic pesticides. These trainings promoted Good Agricultural Practices (GAP) and encouraged the use of organic inputs, enhancing productivity and environmental sustainability. **Activity 2.7.** Demonstration plots totalling over 1 ha were established in Daiama Village to showcase sustainable horticulture. Key farmers managed 0.1–0.3 ha plots with mixed crops, including chilies, tomatoes, peanuts, cucumbers, leafy greens, water spinach, and watermelon. **(Fig.6)**. Home gardens were also developed by women farmers for household consumption. Through regular mentoring, farmers adopted GAP techniques, and two were recognized for exemplary nursery and field management. As incentives, they received drip irrigation systems to enhance water use efficiency and serve as models for others. The integration of short- and medium-cycle crops enabled continuous harvests and monthly income, with daily earnings reaching IDR 100,000–200,000 (approx. USD 6–12). Staggered planting stabilized market prices and ensured consistent supply, strengthening long-term livelihood sustainability. In total, small-scale farmers could earn around IDR 3–5 million (approx. USD 180–300) per month. Through staggered planting, they were able to harvest horticultural crops two to three times per week, stabilizing market prices and ensuring a consistent supply, which strengthened long-term livelihood sustainability. **Activity 2.8.** The horticultural initiative in Daiama gained strong institutional support from local authorities and communities. During a field visit on August 26, 2025, the Deputy Regent confirmed district-level support, including the provision of tractors for land preparation **(Fig.7)**. WCS also assisted in drafting proposals to attract further support and partnerships with cooperatives, banks, and government programs to ensure long-term viability. Site selection prioritized areas near reliable water sources. Local demand for Daiama's organic produce increased significantly, with consumers preferring its superior taste and longer shelf life. The availability

of local vegetables reduced dependence on external traders, strengthened the local economy, and promoted community self-sufficiency.

Output 3. The assumption still holds true. Biodiversity survey training has been conducted, the RFP program is ongoing, and efforts are continuing to achieve the set indicators, with data feeding into district-level planning and conservation decision-making**.** The project continues to provide accurate monitoring data to strengthen community stakeholders' understanding of its importance for biodiversity conservation, ecosystem restoration, and environmental protection. **Activity 3.1 and 3.2**. A biodiversity training was conducted on 23–25 June 2025, attended by 25 university students and 5 government officials. The training enhanced understanding of local biodiversity, ecosystem monitoring, and the relationship between conservation and sustainable livelihoods. It also strengthened collaboration among universities, government agencies, and communities. Following the training, a biodiversity baseline survey was conducted to collect initial data for ecosystem health and conservation monitoring. **Activity 3.3 and 3.4.** As of September, the selection process for the 2025 RFP cohort is ongoing, with results scheduled for announcement in November 2025. **Activity 3.5 and 3.6.** The land use change analysis for 2025 is ongoing, aiming to capture both current and past conditions to identify trends over time. The results will serve as a key variable for spatial planning modelling. Over the next six months, the findings will be disseminated through community and government fora to guide efforts in forest, biodiversity, and lake ecosystem protection and restoration, including the identification of new conservation areas. Over the next six months, findings will be disseminated through community and government fora, guiding forest, biodiversity, and lake ecosystem protection and restoration efforts, including the identification of new conservation areas. **Activity 3.7.** Regular community patrols were conducted from April to September 2025 to protect the targeted lakes (Ledulu and Lendeoen) and surrounding forests. Supported by WCS and BBKSDA NTT, patrol teams carried out one to two patrols per month using the SMART monitoring system **(Fig.8–9, Table 2)**. Patrols focused on preventing illegal logging and fishing, monitoring biodiversity, and removing invasive predatory species threatening native wildlife, including the Rote Island turtle **(Fig.10)**. Twelve eradication events were conducted, capturing 109 mature fish, 58 juveniles, 102 bullfrogs, and around 200 tadpoles, effectively reducing ecological threats. Patrol teams also held on-site discussions with local residents to raise awareness of conservation regulations and the ecological importance of the lake systems **(Fig.11).**

Output 4. The assumption still holds true. Although still at an early stage, the government's support in establishing the Community–Government Forum (Activity 1.5) demonstrates a positive commitment and openness to incorporating technical input into local planning and decision-making processes. The project continues to support district-level stakeholders in developing local spatial planning scenarios that integrate climate resilience, sustainable livelihoods, and biodiversity conservation. Efforts are ongoing to build their proficiency and achieve meaningful capacity development within this group. Standard indicators are still relevant, DI-A03 (3 local organizations with enhanced capability and capacity), DI-C01 (3 knowledge products published and endorsed), DI-C10 (the activity will be implemented in YR3, number of decision-makers attending briefing events). During the first six months, the team carried out various preparations for implementing activities under Output 4, which are scheduled to be conducted in the next six months. Data required to develop spatial planning scenarios using CLUZ and Marxan has been identified, including land use, biodiversity distribution, ecosystem services, socio-economic data, and community land-use practices. A workshop involving the Community–Government Forum will be held within the next six months to discuss preliminary findings, validate spatial data, and collaboratively design conservation and land-use planning scenarios.

Output 5. This activity is scheduled for Year 3, with the work completed in Year 2 serving as the basis and key foundation for achieving this output in Year 3.

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.

Over the past six months, the project faced several implementation challenges across the three target villages. A key issue identified through field assessments was the community's limited experience in horticultural production. Most residents were traditionally engaged in fishing and seaweed farming, while vegetable cultivation demanded new skills in maintenance and pest management. Pest and disease outbreaks, including thrips, whiteflies, fruit flies, and anthracnose, these reduced yields and discouraged expansion. Limited field facilitation also constrained timely technical support for all farmer groups. Despite these difficulties, the project used them as learning opportunities to refine its approach. A strategic shift toward Integrated Farming Systems was introduced, combining horticulture, livestock, and tree-based systems to enhance resource efficiency and resilience. This adaptive approach allows

efficient use of land, water, and labor while aligning with the coastal communities' daily routines. It also promotes family labor optimization, organic and climate-smart farming, and circular resource use, where livestock manure becomes fertilizer, crop residues serve as feed, and agroforestry materials are reused. The system is being implemented in phases: (1) food and horticultural crops, (2) agroforestry and forage planting, and (3) livestock integration. Conservation actions are now embedded within production systems through leguminous crops and tree planting that improve soil fertility and reforestation. The transition to integrated farming is expected to strengthen project sustainability without major budget implications. Adjustments focus mainly on training content, mentoring, and sequencing of activities. While some timeline shifts such as livestock introduction and biogas trials may occur, these are strategic adaptations that enhance long-term livelihood resilience and conservation outcomes and will not affect the budget

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

Discussed with NIRAS:	No
Formal Change Request submitted:	No
Received confirmation of change acceptance:	No
Change Request reference if known:	

4a. Please confirm your actual spend in this financial year to date (i.e. from 1 April 2025 – 30 September 2025)

Actual spend: £ [redacted]

4b. Do you currently expect to have any significant (e.g. more than £5,000) underspend in your budget for this financial year (ending 31 March 2026)?

Yes ☐ **No** ☒ Estimated underspend: £

4c. If you expect an underspend, then you should 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, and not later than 31st December. There is no guarantee that Defra will agree a re-budget so please ensure you have enough time to make appropriate changes to your project if necessary. Please DO NOT send these in the same email as your report.
NB: if you expect an underspend, do not claim anything more than you expect to spend this financial year.

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

Suspicions or allegations related to fraud and error concerns should be reported to fraudanderror@Defra.gov.uk

No

6. Project risk management

6a. If your project has an Overseas Security and Justice assessment, please provide an update on any related risks, and any special conditions in your award paperwork if relevant for your project.

This project does not involve activities that trigger an Overseas Security and Justice (OSJ) assessment. No related security or justice risks have been identified, and there are no special OSJ-related conditions included in the award documentation.

[redacted]

7. Please use this section to respond to any feedback provided when your project was confirmed, or from your most recent Annual Report. As a reminder, all projects that were scored as 'Not Yet Sensitive' in the Gender Equality and Social Inclusion (GESI) assessment of their latest Annual Report should demonstrate how they are meeting the minimum GESI-Sensitive standard.
From the review of our first annual report, we received the comment: **"Excellent reporting with clearly substantive evidence,"** and therefore no response was required. Nevertheless, while the project has achieved the GESI-Sensitive standard, continuous efforts are being made to maintain and further enhance this level of sensitivity. Women, youth, and marginalized groups are now more actively involved in training, planning, and decision-making processes. Gender-sensitive data collection and inclusive participation are promoted to ensure equitable access to resources and project benefits. To enhance knowledge and capacity on GEDSI and SEAH issues, and to ensure more effective integration of these principles into project activities, the project team participated in a national GEDSI and SEAH training organized internally by the WCS Indonesia Program for all staff in July 2025.

Checklist for submission

Have you responded to **feedback from your latest Annual Report Review?** You should respond in section 6, and annexe other requested materials as appropriate.	Yes
Have you reported against the most **up to date information for your project?**	Yes
Have you **clearly highlighted any confidential information** within the report that you do not wish to be shared on our website?	Yes
Include your **project reference** in the subject line of submission email.	Yes
Submit to **BCF-Reports@niras.com**	Yes
Please ensure claim forms and other communications for your project are not included with this report.	Yes