

Biodiversity 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 2024

Please note all projects that were active before 1 October 2024 are required to complete a Half Year Report.

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

Project reference	DARNV022
Project title	Community cricket farming for conservation
Country(ies)/territory(ies)	Cambodia
Lead Organisation	Rising Phoenix Co. Ltd.
Partner(s)	<ol style="list-style-type: none"> 1. Agri House 2. Siem Pang Conservation Organisation 3. Angkor Wildlife and Aquarium
Project leader	Jonathan C. Eames
Report date and number (e.g. HYR1)	1 April – 30 September 2024, HYR1
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).

Although we are not looking for specific reporting against your indicators, please use this opportunity to consider the appropriateness of your M&E systems (are your indicators still relevant, can you report against any Standard Indicators, do your assumptions still hold true?). The guidance can be found on the resources page of the relevant fund website.

Output 1. Feasibility study completed testing if cricket farming is viable alternative livelihood for conservation, and scalable.

1.1. Investigate different accreditation bodies and requirements

We have begun exploring international certification pathways and compliance requirements to ensure our golden cricket standard meets global benchmarks.

In the next few months we will be consulting with food safety experts and certification bodies across key target markets including EU, US, and APAC regions. This will include analysing successful certification models from sustainable agriculture and alternative protein sectors to inform our approach. We also aim to develop relationships with accreditation partners to ensure our standard will be recognized and trusted worldwide.

1.2. Investigate appropriate conservation branding for product

Agri House is currently exploring how Golden Cricket branding can reflect the impact and environmental benefits of cricket farming. We have just begun researching successful sustainability marks like the FSC logo and Rainforest Alliance seal. Once we have compiled our research we will begin discussions with designers to develop an easily recognisable brand.

1.3. Investigate organic cricket feed production and scaling

Agri House is currently analysing potential plant-based inputs with local families within the Rising Phoenix village network to secure sustained supply of new feed inputs. This will require working Siem Pang farmers to identify crops that are experiencing post-harvest losses, and conduct nutritional analysis of the local crops to determine optimal cricket feed formulations. The end goal is to developing integrated procurement model that prioritizes smallholder farmers while ensuring consistent feed quality, and to increase household incomes.

Part of this research will focus on how to ensure that any inputs are as bio-dynamic and organic as possible, and may be tied into the sales agreements.

1.4. Complete financial modelling and business plan

This process is underway although much of this will rely on the information gained from 1.3 and 1.5

1.5. Produce feasibility study for cricket farming

The feasibility study will be begun to be developed in February 2025, once the families are producing their second cycle of crickets, and the opportunity for them to integrate local feed options to reduce their overheads has been assessed.

1.6. Get feasibility study for cricket farming endorsed by a third party

This can only be done once the feasibility study has been produced.

Output 2: 50 cricket breeding units established in two villages providing additional income for 50 households.

2.1. Announcements made in two target villages looking for households to participate in cricket farming

We have selected three villages which are all adjacent on the main road through Siem Pang district. These villages were selected because they already have good uptake of the IBIS Rice scheme and we have established networks and relationships, they have mains electricity, which will serve storage of crickets and they are located on the main road, affording ease of product transportation. On 29 and 30 May 2024, we conducted meetings to announce the cricket project and call households to participate in the project in Khes Svay, Khes Kraom and Pong Kriel villages. The meetings were chaired by Mr. Thong Pan, Preak Meas commune chief, and participated by a total 74 villagers (29 females). After the meeting, 68 farmers registered (43 IBIS Rice members) in cricket farming project ([Annex 1](#)).

2.2. Selection process implemented and 50 households selected in two target villages for cricket farm establishment.

Between 20-23 June 2024, Rising Phoenix and Agri House conducted a survey, gathering necessary information from the 68 households who registered for the scheme. After the assessment, 50 households were selected in three villages of Khes Svay, Khes Kraom and Pong Kriel villages ([Annex 2](#))

2.3. Selected households sign conservation agreement with Rising Phoenix and sales agreement with Agri House.

In October 2024, all 50 selected households signed the conservation and sales agreement with Rising Phoenix and Agri House ([Annex 3](#))

2.4. Training is implemented for the trainers (Rising Phoenix staff) to allow them to provide support to participating households.

Four Rising Phoenix staff were trained, by an Agri House team, on 18 September 2024 to be future trainers (2 females) ([Annex 4](#))

2.5. Training participating households in cricket farming and financial literacy

A series of four workshops were conducted from October 15-18, 2024, in Stung Treng Province, training 100 participants (51 women) from the three target villages. The training covered five key modules: soft skills, SMART goals, financial literacy, digital literacy, and cricket farming techniques, delivered through participatory methods.

The training emphasized practical application through hands-on exercises, group discussions, and case studies, making complex concepts accessible to participants. Most participants had very low initial income (below \$100) and limited financial literacy, with few tracking their income and expenses before the training. Digital literacy focused on Telegram usage for communication and marketing, though many participants initially didn't have smartphones.

All four workshops showed significant knowledge improvements, with the highest gains in areas like break-even point calculation (up to 65% increase) and soft skills (up to 66% increase). Participants showed near-universal satisfaction with the content and teaching methodology across all workshops (99-100% satisfaction rates).

Key challenges included communication barriers, cultural differences, and limited access to technology, which were addressed through visual aids and community-based training approaches.

2.6. Cricket farms establishing at participating households.

Fabrication of the cricket raising pens has begun, as has the development of the Entocore technology that underpins the regulation of the raising environment.

2.7. 50 children from participating households are enrolled in English language training, provided by Siem Pang Conservation.

In March 148 students from the three target villages in Preak Meas commune (Khes Svay, Khes Krom, and Pong Kriel) registered for English language training. By August 17 students remained in class. There are two main reasons for the decline in attendance: August falls within school summer holidays and many children work in the fields at this time. ([Annex 5](#)). Reasons for drop-off in attendance include that the classes are in the evening and many of the households whose children first registered do not have means of transportation to attend class. Some of the participating 50 households only have young children below school age whilst others are new couples without children. The English language training scheme is under review.

2.8. Continued mentoring support to participating households

This activity has not occurred yet.

2.9. Buy back of crickets from compliant farmers and provision of cricket feed.

This activity has not yet occurred as cricket production has not started.

Output 3: Drivers of biodiversity loss (hunting, logging, land encroachment) are reduced at SPWS compared to baseline at start of project.

3.1. Update household information on compliance database for households who have signed the conservation agreements.

A database of 50 households with a family code, contact information and progress tracking table was established for monitoring the compliance ([Annex 6](#)).

3.2. Regular law enforcement patrols in Siem Pang Wildlife Sanctuary

Regular law enforcement patrols led by the Siem Pang PATROL Unit (SPPU) working together with rangers from the Department of Environment, Forestry Administration and Royal Gendarmerie were conducted regularly. Scout patrols working together with rangers from the Department of Environment conducted regular snare removal activities in Siem Pang Wildlife Sanctuary ([Annex 7](#))

3.3. Regular biodiversity monitoring patrols, vulture restaurants, nest, and roost monitoring for key species.

The Rising Phoenix Biodiversity Monitoring Unit conducted regular monitoring patrols by motorbike and on foot. To monitor the vulture population restaurants were held weekly with the provision of a dead water buffalo. A total of 15 vulture nests were found and monitored. We monitored 41 white-shouldered Ibis and 10 giant Ibis nests. We conducted three roost site counts to monitor the white-shouldered ibis population. Monthly biodiversity reports were produced reporting in detail on these activities ([Annex 8](#)).

3.4. Monthly cross checking of law enforcement data against compliance database

Monthly reports on law enforcement were produced by the Siem Pang PATROL Unit (SPPU) and the Surveillance and Intelligence Reporting Unit (SIRU). Data was checked against the compliance database. Between April-September 2024 no cricket farmer was found to have broken the terms of their agreement.

3.5. Annual forest cover change study completed and report produced

The forest cover change assessment report of 2022-2024 was completed in September 2024 ([Annex 9](#)).

The report provides an analysis of forest cover changes within SPWS using a 2021 baseline, from January 2022 to January 2024, aiming to systematically assess and document the extent, rate, and patterns of deforestation, reforestation, and forest degradation.

Forest cover in SPWS was 91.3% in January 2022. This had declined to 91% by January 2023 and 90.8% by January 2024. In total, 383 ha of forest were lost between January 2022 and January 2023, and a further 303 ha between January 2023 and January 2024. During the reporting period 686 ha of forest were lost.

Net forest loss between 2021-2022 was 1,841 ha, whilst net forest loss between 2022-2024 was 686 ha. This suggests that the rate of forest loss could be declining. The methodology used for the 2021-2022 calculation differed from that used in this study and a source of potential error. In three focal areas the results were as follows: The Khampouk area showed a higher rate of forest loss than during the baseline period. Forest loss in the Khampouk area is as a result of forest conversion to rice and cashew. The southern boundary area showed a lower rate of forest loss than during the baseline period. The IBIS Rice project has helped reduce the rate of encroachment into SPWS. The Sekong River corridor area showed a higher rate of forest loss than during the baseline period. This is of concern because of the rarity and high biodiversity value of this forest type. Seven recommendations to reduce further forest loss are made.

3.6. Tarantula harvesting survey implemented, data analyses and short communication submitted.

A questionnaire comprising 22 questions was prepared for the survey ([Annex 10](#)). The survey will be conducted in November in two villages, targeting 30 households identified as collectors. This period coincides with the harvesting period.

3.7. Tarantula breeding pilot is established

A total of 34 Tarantulas *Cyriopagopus longipes* were used in the first breeding trial (8 males and 26 females). One infertile egg sac was produced and most mating did not prove successful. All males died over time as expected, but none was killed during mating. As of the end of September we have 7 females remaining. We will collect about twenty new individuals by the end of December 2024 (6 males and 14 females) to conduct a second trial. The pilot faces particularly challenges because this species is territorial. So each pair must be kept separately from one another.

3.8. Case study of tarantula breeding pilot is prepared and published.

Case study of tarantula breeding pilot will be prepared at the end of Year 2.

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.

The project manager is Mr. Mak Sopheap, who is the Head of the Community Development Unit at Rising Phoenix. In the project document we listed James Lyon as Operations Manager but he has since left Cambodia and now longer works on this project. We have recruited Mr. Phan Bunthi as Head of finance and administration at Rising Phoenix, he is responsible for financial reporting for this project. Kem Dyla is the designated finance officer working under Phan Bunthi. Jonathan C Eames remains project leader.

Two project staff were recruited as value chain technicians. They are Miss Chanthea Em and Mr Toet Vieng Ms. Kacheara Sothy has since replaced Toet Vieng who has been reassigned within the unit.

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: *If you submitted a financial Change Request, you can find the reference in the email from NIRAS confirming the outcome*

4a. Please confirm your actual spend in this financial year to date (i.e. from 1 April 2024 – 30 September 2024)

Actual spend:

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 2025)?

Yes No

4c. If you expect and 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. 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 BCF management, monitoring, or financial procedures?

No

6. Please use this section to respond to any feedback provided when your project was confirmed, or from your most recent annual report. If your project was subject to an Overseas Security and Justice Assistance assessment please use this space to comment on any changes to international human rights risks, and to address any additional mitigations outlined in your offer letters. Please provide the comment and then your response. If you have already provided a response, please confirm when.

No

Checklist for submission

For New Projects (i.e. starting after 1st April 2024)	
Have you responded to any additional feedback (other than caveats) received in the letter you received to say your application was successful which requested response at HYR (including safeguarding points)? You should respond in section 6, annexes other requested materials as appropriate.	N/A
If not already submitted, have you attached your risk register ?	
For Existing Projects (i.e. started before 1st April 2024)	
Have you responded to feedback from your latest Annual Report Review ? You should respond in section 6, annexes other requested materials as appropriate.	
For All Projects	
Include your project reference in the subject line of submission email.	Yes
Submit to BCFs-Report@niras.com .	Yes
Have you clearly highlighted any confidential information within the report that you do not wish to be shared on our website?	N/A
Have you reported against the most up to date information for your project ?	Yes
Please ensure claim forms and other communications for your project are not included with this report.	