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: 31ˢᵗ October 2023

Project reference	*This should be the project reference provided in your offer paperwork and not your application number* IWT105
Project title	Enabling collaborative crime prevention targeting IWT of Vietnam's unique biodiversity
Country(ies)/territory(ies)	Vietnam
Lead partner	Re:wild
Partner(s)	Fauna & Flora, University of Maryland
Project leader	James Slade
Report date and number (e.g. HYR1)	31ˢᵗ October 2023 HYR2
Project website/blog/social media	*ArcGIS Project Story Map -* LINK

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: Park rangers, police, and CCTs implementing crime prevention strategies and evaluating impact on IWT (Y1-3) *Activity 1.1 At least 60% of protection activities are focused on preventative measures, such as targeting crime hotspots and place networks, by the end of Year 2.* As reported in the Y2 annual report, Information-based patrolling now determines where teams in both Intensive Protection Zones (IPZs), Khe Choang and Co Phat, focus their efforts, ensuring 90% of patrols (from a target of 60%) use hotspots to plan their activities. *Activity 1.2 70% of trained rangers from FPD report improved capacity in crime prevention by end of Year 2 with systematic information exchange between all agencies (Police, FPD, CCTs) by end of Year 3.* Following the Situational Crime Prevention and Place-Network Investigations Training in March 2023, the Forest Protection Department received training on integrated SMART indicators and how to collect data using the new unified Vietnamese National SMART Data Model in August 2023. The SMART database for PMNP is now harmonised between all stakeholders who collect data. The Forest Protection Department has requested further advanced analyst training for Feb/March 2024 for both SMART and crime prevention.

Activity 1.3 25% of protection efforts are investigating/targeting crime network places of IWT intermediaries by end of Year 2,from a baseline of 0% now.

As reported previously, CCTs and FPD are using the results of the SMART data hotspot detection report to investigate known locations of illegal activity further. Displacement of these activities due to increased capacity of the CCTs and FPD have generated further information, including new primary travel routes. decrease in the use of hunting dogs, weapons used are changing from military firearms to homemade weapons and more is now known about facilitating locations to prepare and convene for hunting trips. From a baseline of 0, these are now taken into consideration when planning and discussing any patrols.

Activity 1.4 All available patrol, investigative and wildlife observations are recorded for monitoring and evaluation, and all department heads and team leaders are supported to interpret data for IWT impact monitoring and adaptive management by the end of Year 2.

Action oriented research continued in September, when the two PhD researchers from University of Maryland, Judith Rakowski and Elle Xu were in Nghe An province to carry out further data collection on place-network investigations associated with illegal wildlife trade, commercial snaring within Pu Mat National Park as well as strains faced by communities that may lead to involvement in illegal hunting. These research methods and early findings were presented to department heads from the Pu Mat National Park Scientific and Forest Protection Departments.This information, combined with SMART data from patrols, is being utilised to inform objectives for PMNP's 2024 annual strategic plan (to be developed in Nov./Dec. 2023). This strategic plan will in turn influence the objectives of the Park's overall Sustainable Forest Management Plan, as per the Standard Indicator IWTCF- B21, (Number of direct contributions to the Pu Mat National Park's Sustainable Forest Management Plan's objectives).

Output 2: Embed community engagement into protection efforts by advancing existing CCT-supported patrols (Y1-3)

Activity 2.1 50% increase in CCT area coverage within the two intensive protection zones, by end of Year 2.

Between April and September 2023, the CCTs from Co Phat and Khe Choang stations conducted 117 and 142 patrols respectively, totaling 790 and 1083 patrol hours (area presence) and 998/1266 kms of distance. While the overall distance from 2022 is slightly lower than this year, mainly due to a heavier monsoon season, there were in fact more patrols and a greater area range of patrol locations. Forest survival training for CCTs was conducted in 02 days, from 30 - 31st of May 2023, in order to promote wider-ranging patrol coverage.

Activity 2.2 100% of CCT patrols recorded in SMART.

100% of all CCT patrols continue to be recorded in SMART.

Activity 2.3 One Park Protection Officer is embedded within the PMNP administration, by the end of Year 2.

The Park Protection Officer continues to live and work within Pu Mat National Park during all working hours.

Activity 2.4 All CCT patrols have at least 60% knowledge base of individuals competent in Ranger-based data collection by the end of Year 1 and maintained through the end of the project.

CCT members report confidence in using SMART for data collection. In early 2024, we plan to assess all personnel using the SMART Competence Register & Evaluation Tool, which is currently in development. The Pu Mat CCT teams have been identified as a pilot site for testing the tool.

Activity 2.5 Zero population decline measured by occupancies for key indicator species (red muntjac, Annamite striped rabbit) in two intensive protection zones based on baseline data from Y1 Q4/Y2 Q1, by the end of Year 3.

Camera trapping is underway at Co Phat station and the baseline data has already been established. Due to a number of factors, including the departure of key personnel and a heavy monsoon season, the entire camera trapping process has been delayed. We will include a change request to reflect this along with this HY report.

Activity 2.6 50% decline in snare occupancies in two intensive protection zones based on baseline data from Y1 Q4/Y2 Q1, by end of Y3.

Baseline data has been established and ongoing analysis of the snare occupancies is due to continue in December, with a final occupancy report in March 2024. Observational data to date has shown a decrease in snaring detected so far, with only 8 snares (noose traps) and 2 pitfall traps recorded detected so far between April and September, despite increased patrolling. There is still further data to be analysed however.

Output 3: Community-level responses in five communities contributing to IWT reduction through local guardianship and improved wellbeing (Y1-3)

Activity 3.1 All five communities are aware of wildlife crime and at least 3 of 5 of communities have adopted hunting prohibitions by project completion date.

Delivery of the repeat socio-economic/Knowledge, Attitudes and Behaviours (KAB) survey was conducted in September 2023 in Co Phat and Bung (Mon Son commune), Bu, Na (Chau Khe commune) as well as Veu villages 1,2,3,4 (Phuc Son Commune, Anh Son district), which are the same villages as first KAB survey but integrated new villages Veu under a new Fauna & Flora elephant project for implementing more activities, environmental awareness and livelihoods. Project staff are still working in 5 villages and engaging with commune leaders to ensure hunting prohibitions have been added to commune regulations for 2024 and beyond..

Activity 3.2 More than 50% of members in Youth & Women's Unions report engaging with household members to discuss behaviour change associated with IWT prohibitions by the end of Year 3.

 The two PhD researchers from University of Maryland specifically engaged with members of the Women's Union in September and October 2023 during the second phase of their interviews and data collection within the communities. More information to follow as they continue to work throughout Y3 of the project.

Activity 3.3 At least 3 of 5 of communities have adopted an anonymous crime reporting system for communities by the end of Year 3.

Project staff are currently working with two other stakeholders in Vietnam which have established hotlines, one local and one national, to consolidate efforts and measure the effectiveness of these resources.

Output 4: Five communities report benefiting from livelihood diversification and attribute benefits to commitments to IWT reduction (Y1-3)

Activity 4.1 By end of Year 2, all five communities have created a system of house-hold level micro-financing loans and 200-300 community members (50% women) have benefited from training in land use planning processes, coupled with technical advice on market access, crop diversification, increased farm productivity and forest gardens (linked to micro-finance).

Field trips between June and September were held to discuss with communities how to increase and/or diversify livelihoods while continuing to monitor on-going livelihood support. This included discussions on IWT indicators and encouraged commitment with the participants to reduce harmful forest use activities.

On June 30th, at the community house of Co Phat village, IWT project staff cooperated with veterinarian trainers, through the Farmer's Association of Mon Son Commune to organise a training course on disease prevention for livestock/ poultry and how to grow the grass VA06, which is beneficial for livestock, for 34 participants of Dan Lai ethnic minority (18 female and 16 male).

Through the training course, participants were mentored how to prevent their livestock and poultry from diseases; steps to implement safe and sustainable agriculture. Moreover, participants were guided to grow the grass VA06, how to actively prepare feed to breed their livestock, and become less dependent on the primary forest. Participants also practised models in the field to consolidate their knowledge and skills and pass on to others throughout the community.

Activity 4.2. By project end, 600- 700 households report at least 10% increased income and/or diversified/more resilient livelihoods, linked to project activities.

During the KAB survey, a total of 341 samples were collected in seven villages of three communes living in and around PMNP: Chau Khe, Mon Son and Phuc Son with 55% men and 45% women participating. The significant confident reached 95%; see below for key findings:

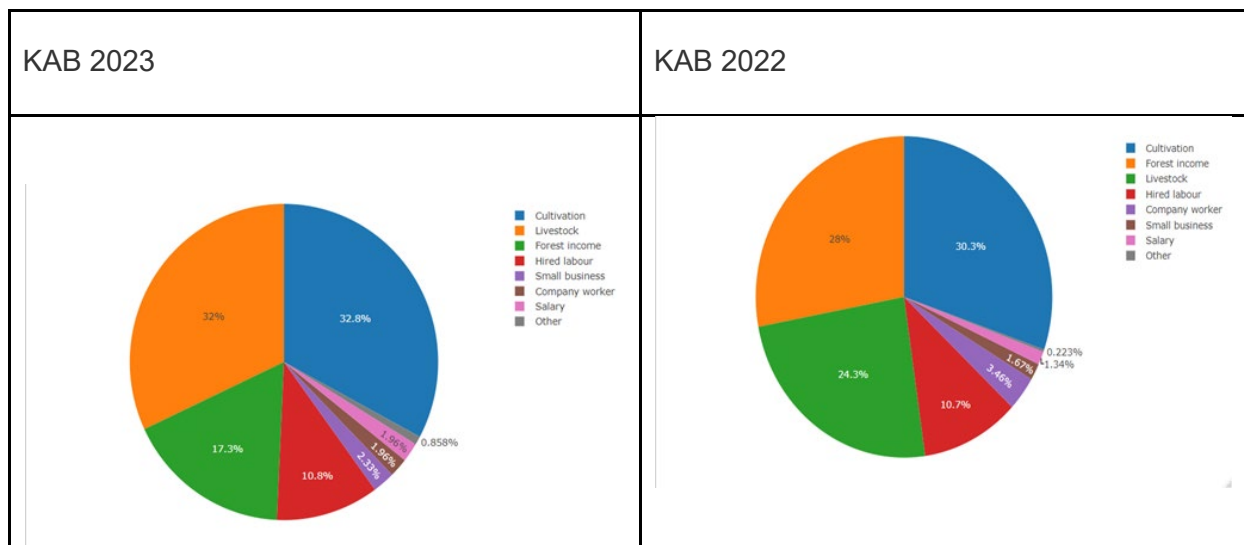| KAB 2023	KAB 2022

Chart 1: Household income portfolio in 2023 and 2022

For household income portfolios in 2023, the most important income sources came from cultivation (32.8%), next was from livestock (32%), then forest income (17.3%), and finally hired labour (10.8%). In which, income from forests in 2022 reduced with only 41% of total income sourced from forests in comparison to 70% in 2022.

The project continues to work with the community members, using the information above, to determine how best to expand support from the livelihoods component of this project. However, this continues to be a challenging aspect and we are undergoing internal review as to how best achieve our goals.

Activity 4.3 At least 50% of villages inside PMNP have clarified Forest Land Allocation tenures by end of Year 2, and the tenure process is initiated by end Year 3.

An official proposal was prepared for the Pu Mat National Park Management Board and has been submitted to the authorities for the land use allocation of the Dan Lai community living in the core area in Co Phat and Ban Bung villages in February 2023. Following this, in August 2023, the Pu Mat Management Board proposed 360ha for land use planning for the Dan Lai ethnic minority to the National Forestry Planning Commission for the period from 2023 - 2030.

Output 5: 5. Replication of model promoted nationally and internationally through dissemination of resources and knowledge (Y3)

In August, Project Lead James Slade presented at the 31st Problem-Oriented Policing Conference in Boulder, Colorado. The presentation, titled "Breaking Routines: *Using the Problem-Oriented Approach and Crime Prevention to Support Global Conservation Efforts*" highlighted elements of the IWT project in Vietnam, with reference to support from the IWT Challenge Fund and UKAID.

University of Maryland researchers have given several lectures and presentations on the relevance of approaches developed in criminology to IWT issues and their application to conservation.

Meredith Gore and Elle Xu delivered a keynote presentation to the Conservation GIS Annual Conference titled "Interdisciplinary mapping of harmful human-environment relationships and conservation crime", in August. This was an invited keynote presentation to an international professional scientific society. The presentation highlighted the research as an example of community-based conservation crime prevention research.

Xu, E. J. (2023). "Conservation Criminology and Wildlife Trafficking in Vietnam". Guest lecture, University of Maryland, College Park, MD. May 2, 2023. Rakowski, Judith (2023). "Applicability and Benefits of General Strain Theory for Wildlife Crime Prevention", Guest lecture, University of Maryland, MD. August 28th, 2023This was an invited guest lecture at UMD's GEOG 331 (Human Dimensions of Global Environmental Change) class, where PhD student Elle Xu gave a scientific presentation on her current research findings.

Xu, E. J. (2023). Speed talk. "Exploring Crime Place-Network of Poaching and Wildlife Trade in Vietnam". Center of Geospatial Information Science Workshop. College park, MD, USA, September, 2023. This was an invited talk at an intradepartmental workshop between geography departments at UMD, University of Vienna, and UC Santa Barbara to present the research findings and exchange ideas on how to apply spatial analysis to understand conservation crimes.

Rakowski, Judith; Xu, Elle (2023). "PNI and General Strain Theory methodologies for wildlife crime prevention, on the example of Pu Mat National Park", Workshop and Discussion, Department of Geographical Sciences, University of Maryland, MD. September 20th, 2023.
In this workshop and discussion where Elle Xu and Judith Rakowski presented, discussed and developed data collection tools from place-network investigation and general strain theory for the application for wildlife crime prevention in different settings. Discussion topics included adjustments necessary for different settings, e.g. different strain dimensions or overlap of places and purposes for the 4 Cs in PNI.

Rakowski, J.; Xu, E. (2023). "Conservation Criminology and Code of Conduct for Ethical Research". Training of 4 interpreters from Vinh University in Vinh, Vietnam, October 9th and 16th. In these 2 half-day training sessions the two PhD students trained 4 students from Vinh University, who accompanied them afterwards into the field in Pu Mat National Park. The training sessions included: 1) Overview of Conservation Criminology, Situational Crime Prevention, Crime Scripting, Place Network Investigation and General Strain Theory, 2) Ethical Research: IRB, researcher and interviewer responsibilities, informed consent, storage of data, interviewing techniques.

Rakowski, J (2023): "General Strain Theory for IWT in Pu Mat National Park". Presentation and discussion for NGOs, Con Cuong, Vietnam, October 21st, 2023. In this 2-hours session with a research staff member of the NGO "Save Vietnam's Wildlife" the relevance of General Strain Theory, strain management and application for the area were presented and discussed with a research and education staff of the NGO.

An ArcGIS Story Map is currently under development, for sharing to a wider public audience in an interactive format, with all sensitive information removed. As a precursor to Output 5.1 (a national level meeting to share project results), this Story Map was displayed to the PMNP management board in October, with positive feedback as to how highly visual tools can support the park in better planning, based on crime prevention methods. This approach is in support of our standard indicator IWTCF-D26, for new and enhanced tools/approaches developed to tackle IWT. A second meeting with Save Vietnam's Wildlife aimed to encourage their efforts in applying prevention methods to their anti-poaching team. Along with the Strain Theory presentation, this is working towards achieving standard indicator IWTCF-D03 (Number of Pu Mat stakeholders engaged in supplementary training for wildlife crime prevention). They have agreed to begin sharing data to increase the Story Map's outputs, pending a few data-sharing agreements to be completed in the next month or so and we aim to include further training with their involvement going forward.

Regarding Output 5.4, using learning to generate further crime prevention in Southeast Asia, Fauna & Flora is currently training in 5 sites across Vietnam using materials developed through this project, while Re:wild has begun piloting crime script development in the Philippines using the project's methodology.

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 has unfortunately lost more personnel (moved on to other organisations in Vietnam) which has put us behind on the camera trapping and livelihood components of the project. While these positions have been filled, we are currently considering the request of a no-cost extension in order to give us sufficient time to complete our goals. We will be submitting this request shortly and separately.

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: To be submitted shortly.

Received confirmation of change acceptance   N/A

Change request reference if known:

4a. Please confirm your actual spend in this financial year to date (i.e. from 1 April 2023 – 30 September 2023)

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 2024)?

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

4c. 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 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.

NB: if you expect an underspend, do not claim anything more than you expect to spend this financial year.

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

Not at this time.

If you are a new project and you received feedback comments that requested a response, 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.

All new projects (excluding Darwin Plus Fellowships and IWT Challenge Fund Evidence projects) should submit their Risk Register with this report if they have not already done so.

Please note: Any <u>planned</u> modifications to your project schedule/workplan can be discussed in this report but should also be raised with NIRAS 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. 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**