

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	IWT 107
Project title	Strengthening governance of legal wildlife trade to combat illegal trade
Country(ies)/territory(ies)	Indonesia
Lead partner	Yayasan IAR Indonesia
Partner(s)	KSDAE, Lancaster University (Jacob Phelps), ASLIQEWAN
Project leader	Karmele Llano Sanchez
Report date and number (e.g. HYR1)	<i>HYR3, reporting period April – September 2023</i>
Project website/blog/social media	

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).

We are reporting our progress in the past 6 months against the project indicators for each of our four outputs:

1. Output 1: Wildlife trade regulatory system and zoonotic disease risk in animal markets and along the supply chain in Indonesia are well-understood.

We have now completed this output. Both the Situational Analysis, including the legal review (Indicator 1.1) and Zoonotic Disease Risk Assessment (DRA) (Indicator 1.2) were concluded (as reported in our previous Annual Report).

In addition, as a result of a collaboration with the Royal Veterinary College/ Zoological Society of London, a more specific and detailed DRA has been drafted. This was based on the previous DRA produced but has been developed further. A comprehensive investigation using the available literature was carried out to provide further hard evidence of zoonotic disease risks in bird markets. Macaques were chosen as the focus species as they are considered to be a high-risk species for zoonotic disease transmission and due to their regular presence in markets (despite being in violation of trade regulations). Long-tailed macaques are also one of this project's four focal species. This 200-page report is entitled, *A qualitative analysis of the risk from zoonotic disease to people associated with long-tailed macaques (Macaca fascicularis) in wildlife markets, Indonesia*. The report will be used to help raise awareness on the risks involved in unregulated trade and provide evidence to back up future changes in policy and regulation.

2. Output 2: Development of a national One Health framework focused on the wildlife trade through top-down and bottom-up multi-stakeholders engagement and collaboration.

2.1. Strategy Development:

The main pillars for this output are now completed. Focus Group Discussions (FGDs) with 57 different agencies and departments in the environment, health, and agriculture sectors in the two target provinces (DKI Jakarta and West Java) have been concluded (Indicator 2.1). These FGDs have resulted in the joint formulation of two locally-based One Health strategies, which are currently being implemented at the three target markets in the cities of Jakarta and Bandung. While these strategies already gained approval from the local level stakeholders involved in the FGDs, we have continued our efforts to push for endorsement or support from higher level government stakeholders through the National Seminars, talk shows, communication, and meetings with stakeholders (discussed in more detail in the next section).

2.2. Stakeholder Working Group:

Communication with stakeholders in the working group has been regular and effective. Meetings have been conducted with market authorities and the Bandung City Food Security and Agriculture Service (DKPP) to implement animal health checks, vaccinations, and the animal health reporting system at the Sukahaji market. Similarly, meetings with the Jakarta Food, Maritime, and Fisheries Security Service (DKPKP) have been held to discuss the implementation of the strategy that was developed during the FGDs.

We are also in regular contact with the PUSKEMAS (local health clinics), PD Pasar (the market authority), Human Health Agency (Dinas Kesehatan), Environment Agency (Dinas Lingkungan Hidup), the heads of local village councils in Jatinegara and Sukahaji (Kelurahan) and BKSDA in both Jakarta and Bandung. Regular communication has also continued with the traders in all markets.

3. Output 3: Improved capability, capacity and transparency amongst the two key government agencies responsible for the governance and enforcement of the wildlife markets regulations (KSDAE and GAKKUM under the Ministry of Environment and Forestry) to better regulate legal wildlife trade.

YIARI has continued to bolster the capacities of KSDAE, GAKKUM and other governmental agencies. To advance the One Health concept and foster inter-agency collaborations at higher administrative levels, two seminars were in preparation for national and provincial-level agencies as part of our efforts for developing a National One Health strategy (Indicator 3.1). In Pontianak, West Kalimantan, we organized a talk show and vaccination campaign that concentrated on the Rabies issue, serving as a preliminary step for the forthcoming national seminar in the province. Furthermore, we are currently preparing for a workshop on the handling of confiscated live animals and evidence of criminal acts. This workshop, scheduled for November 14-15th, 2023, will be conducted in cooperation with BKSDA West Papua. Our collaborations with both KSDAE and GAKKUM are ongoing, with a series of additional events and work collaborations focused on promoting the One Health concept and combating the illegal wildlife trade (Indicator 3.2).

3.1. National-level Seminars:

Two national-level seminars have been prepared during this reporting period, one in Bandung, West Java, and one in Pontianak, West Kalimantan. The national seminar in Bandung has already taken place, although just outside of this reporting period (in mid-October), and the seminar in Pontianak will be held in December 2023. Both seminars represent a significant step towards both introducing and promoting the One Health strategy to higher level stakeholders (Indicator 2.2).

For the national seminar in Pontianak, we acquired full support from the Rector of Tanjungpura University. The seminar committee comprises a multidisciplinary team from different backgrounds including: medical, biology, chemistry, social, and agriculture fields of expertise.

3.2. Talk show & Rabies:

A pre-event to the national seminar in Pontianak was held at the end of September in order to help raise awareness among the scientific community, the general public, and governmental

agencies and foster collaboration on zoonosis prevention in West Kalimantan. YIARI partnered with the University of Tanjungpura (UNTAN) to host a talk show in Pontianak, West Kalimantan. The event, entitled "*Collaboration and Communication for the Mitigation of Rabies in West Kalimantan*," marked the first of its kind in the region. It was hosted at UNTAN's Faculty of Medicine and featured the participation of a microbiologist, the Head of the Animal Husbandry Department, and the Head of the Health Department of West Kalimantan province. The talk show gathered four professional experts, influencers, and 150 local university students for a comprehensive discussion on various aspects of rabies prevention, treatment, and awareness. Notably, the head of Farming and Animal Husbandry of West Kalimantan, the Head of Health Agency of West Kalimantan, The Dean of the medical faculty at the Tanjungpura University as well as a number of lecturers participated in the meeting.

In conjunction with the talk show, a rabies vaccination campaign was carried out in collaboration with the provincial Animal Husbandry Department. As part of the World Rabies Day observance on October 7th, a public call for free rabies vaccination for dogs and cats was initiated, with vaccination services provided at the UNTAN campus. This event signified a critical step in engaging multiple stakeholders around the One Health framework and continually enhancing their capacity in managing zoonotic disease risks. This vaccination event was part of a national level government programme. West Kalimantan is a known red-zone for rabies (16 people have died from rabies this year).

In relation to the World Rabies Day, YIARI also collaborated with Padjadjaran University to produce a video on rabies awareness.

<https://www.youtube.com/watch?v=SrRGI9mABLg&list=PL2uUBs3A6pFS9jilBe59jWsUV7z0U6gkY>

3.3. Other Collaborations:

YIARI also participated in two events aimed at promoting the One Health concept among governmental and non-governmental stakeholders. A workshop in collaboration with KSDAE was held in September 2023 in Jakarta. The workshop's objective was to provide training to journalists on the One Health concept. YIARI's Senior Manager in Animal Welfare and Health delivered a presentation on the health risks associated with the illegal wildlife trade and its connections with zoonotic disease. This initiative, focused on training journalists in One Health principles, is expected to enhance awareness both within the public and governmental sectors. It will contribute to strengthening our long-term project approach.

Additionally, another event took place at the end of September 2023 at Tegal Alur Rescue Centre in conjunction with BKSDA. The Director of Species and Genetic Biodiversity Conservation (KKHSG) also attended. The event was entitled "*Performance of Veterinary Service – a follow up mission by World of Animal Health (WOAH)*". YIARI actively contributed to the discussion session of this meeting, which included participation from WOA, the Ministry of Agriculture, the Ministry of Environment and Forestry and FAO representatives.

Furthermore, as part of YIARI's strategy to combat illegal wildlife trade in Indonesia, YIARI's Wildlife Protection Unit (WPU) has initiated cross-institutional cooperation with law enforcement agencies to uncover wildlife crime cases. This includes the disclosure of the pangolin trade network in West Kalimantan and the orangutan trade network in Aceh, which were found to have links to markets in Thailand. These investigations resulted in the disclosure of 133 profiles of hunters, traders, and middlemen involved in the pangolin trade network, leading to 39 prosecutions through collaboration with GAKKUM, BKSDA, and police departments. Such extensive cross-institutional collaboration to disrupt large-scale trade networks is a rare achievement in Indonesia and underlines the successful efforts of YIARI in catalysing multi-agency cooperation.

Presently, WPU is supporting GAKKUM in an international case with the Financial Transaction Reports and Analysis Centre (PPATK) to verify suspicions of financial transactions by illegal traders involved in money laundering. WPU is also working with the police on Technology Intelligence to perform data extraction and digital forensics. In West Kalimantan, WPU has

established relationships and conducted investigations with the Sarawak Forestry Corporation concerning the smuggling of turtle eggs on the Indonesia-Malaysia border, as a follow-up to the Entikong workshop held last year (Indicator 3.2).

4. Output 4: The trial implementation of the one-health strategy at three markets in DKI Jakarta (2) and West Java (1) and two forest-edge communities involved in the supply of wildlife.

Significant progress towards this output has been made in the past six months as outlined below.

4.1. Trial Implementation in Animal Markets:

A draft of the implementation plan and timeline has been developed for the three target markets. Notably, six socialization events have taken place regarding human and animal health and the wildlife trade regulations at the three target animal markets. These events also involved two health checks for traders, market staff, and visitors, as well as surveillance of the sanitary and welfare conditions of the stalls (Indicator 4.1). In addition, two zoonotic diseases surveillance efforts were also carried out by provincial and national agencies at Jatinegara and Sukahaji markets (Indicator 0.2).

4.1.1. Socializations:

Two socialization events were organized by the Bandung City Food Security and Agriculture Service (DKPP) at Sukahaji market, one in April, and another in July. These events saw the participation of 25 traders, along with representatives from various agencies and organizations, including the Government Market Authority (PD) Pasar Juara Bandung City Sukahaji, PT Sindang Jaya, Bojongloa Kaler Healthy District Forum, Sukahaji Market Community Association (RWP), and the Sukahaji Village Administration. The primary objectives of these activities were to build trust, enhance stakeholder engagement in the market, encourage active involvement in preventing zoonoses, promote healthy practices among traders, ensure ongoing monitoring of zoonotic incidents, and improve both trader and animal welfare.

In addition, two socialization events and additional free health checks for market traders, named SATSETSATSET (*SATwa SEhaT maSyarAkaT SEjahTera*) or “Healthy Animals, Healthy Community”, were conducted by the Citarip Community Health Center (Puskesmas) in collaboration with the University of Padjajaran at Sukahaji market. These health checks were designed to assess potential risks of non-infectious diseases among market stakeholders, including traders (i.e., animal traders and others), market authorities and visitors upon request. The first health check, held in August, involved 50 participants, while the second event in September, involved 75 participants with nearly 50% being traders. Health checks included the monitoring of physical conditions, blood pressure, glucose, and cholesterol. This was complemented by a questionnaire administered by veterinary students from the University of Padjajaran, who also conducted direct observations of shop conditions, animals, and any occurrences of illness.

Another two events were undertaken by BKSDA Jakarta, which organized a socialisation session at the Jatinegara and Pramuka markets in Jakarta regarding the regulations governing legal and illegal wildlife trade, including permits and the trade of protected and non-protected species. This marked the first time such an event had occurred in both markets’ history and received a positive response from traders. The engagement of BKSDA Jakarta in the FGDs held in Jakarta, particularly the active participation of the officer Deny in these discussions, appeared to have been instrumental in piquing BKSDA's interest and driving subsequent actions. By bringing the discussion to the table and shedding light on the serious issues related to zoonosis transmission and the wildlife trade at the Jatinegara and Pramuka markets, BKSDA Jakarta now appears more inclined to take action by raising awareness among traders and increasing their presence at the markets.

4.1.2. Markets’ Surveillance:

A visit to Jatinegara Market by DKPKP, the Provincial Food, Marine and Fisheries Agency, took place in September to check for zoonotic diseases including bird flu. This is the first time DKPKP have ever visited the market in its history for this purpose. Members of the FGDs held earlier in the year were part of the survey team. Additionally, the National Research and Innovation Agency (BRIN)—one of the national governmental agencies that sent representatives to our FGDs—visited Sukahaji Market in September to carry out an Avian Influenza surveillance mission. This was also the first time that BRIN conducted this type of activity in a number of years.

In July, DKPP launched an application called E-LMAN HATI, which allows the citizens of Bandung city to easily report animal health issues. This initiative assists DKPP in monitoring potential risks of zoonotic disease transmission and identifying hotspot areas requiring interventions.

Furthermore, YIARI has continued to carry out monthly monitoring surveys of the wildlife trade at the three target markets (see M&E section).

Finally, a meeting was convened with Puskesmas Jakarta to organize health checks for traders in both Pramuka and Jatineraga markets, with these events anticipated to take place soon. Plans are also in place for the installation of signboards on animal and human health after the Indonesian elections in February 2024.

4.2. Forest-edge Communities' Outreach:

4.2.1. West Kalimantan:

In West Kalimantan, ongoing efforts have been made in the target villages through informal education and socializations that focus around the One Health concept. Building trust in these remote areas is not easy and can take time. For this reason, one of YIARI's Dayak staff has been living and working in the community for the last couple of years. He carries out informal interviews, meetings and focus group discussions with various members of the communities to collect information, gauge levels of education and understanding and perceptions. He also provides education and awareness regarding human and domestic animal health and the health risks associated with hunting. Moreover, he also actively engages with children in the villages encouraging them to draw as well as read and write.

YIARI has started informal communications with the local health clinic (Puskesmas) in this region and are planning to collaborate in educating communities on child nutrition, risks associated with eating wild meat and the common diseases prevalent in the areas. Three meetings with village administrators in Hulu Sungai Village were held as well as discussions with traditional and religious leaders regarding these activities.

Following the survey conducted by YIARI's media team, a short video documentary was produced and published drawing from the collected information and educational strategies. The documentary sheds light on the health-related issues and behaviours that increase the risk of zoonotic disease. In addition, comics and other types of videos are being produced to help disseminate important health-related information to these local communities.

4.2.2. West Java:

In April 2023, an educational workshop for an organised hunting community (*Perbakin*) was held in Bandung. Approximately 40 people participated in this event, which was facilitated through a collaboration with the University of Padjadjaran and featured representatives from the medical, veterinary, and communication faculties. Despite being professional and legal hunting, the concept of zoonotic disease information was new to them. The information presented was received well, and it will be added into their training/educational programme. The event was recorded and was screened on the University's TV channel, and is now published online for a wider audience. The video can be accessed in the following link: <https://www.youtube.com/watch?v=D-ji ai 54II/>.

Monitoring & Evaluation:

Based on our monthly market monitoring surveys, we calculated the Encounter Rate (ER) for our four target species in each market during this reporting period (April-September 2023) and compared it to the same period in 2022 (April-September 2022). The ER decreased only for flying foxes (*Pteropus vampyrus*) across the three markets, dropping from an average of 4.48 in 2022 to 3.00 in 2023. Looking at the results per market, the ER for flying foxes was lower in Jatinegara and Sukahaji (with a difference of 2.10 to 3.67 individuals per market visit), but not in Pramuka, which saw an increase of 1.33 individuals per market visit.

The Great Green Leafbird (*Chloropsis sonnerati*) experienced a significant increase in ER across the markets, rising from 7.53 to 30.00. This increase was observed in the Pramuka and Jatinegara markets, with Pramuka contributing the most to this rise (from 15.67 to 82.67 individuals per market visit). Sukahaji had a slight decrease in the Great Green Leafbird ER (from 5.60 to 4.33).

The ER for Black-winged Myna (*Acridotheres melanopterus*) showed a sharp increase in the Pramuka market (from 5.67 to 32.67) but decreased in both Jatinegara (from 2.33 to 0.00) and Sukahaji markets (from 7.20 to 6.83).

The ER for Long-tailed Macaques (*Macaca fascicularis*) almost doubled across the markets (from 8.86 to 14.39), with Jatinegara contributing the most to this increase (from 22.67 to 36.33). In Sukahaji market, the ER of long-tailed macaques increased from 1.40 to 4.50. In the Pramuka market, the ER remained relatively constant—2.50 in 2022 and 2.33 in 2023.

For all the 84 protected species monitored during the market surveys (including the two target non-protected species), the number of individuals encountered also increased across the three markets, rising from an ER of 99.7 to 211.7. The significant increase in the overall number of wildlife was observed only in the Pramuka market (from 123.5 to 432.2), while a small increase was observed in the Sukahaji market (from 104.2 to 137.0), and a reduction was seen in the Jatinegara market (from 72.2 to 66.2).

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.

We encountered a number of challenges while implementing the One Health strategy at Pramuka and Jatinegara markets in Jakarta. These challenges encompassed issues related to the markets' legal status and their complex governance and administrative structures. Furthermore, challenges faced in each market was different and, therefore, required different approaches.

At the Jatinegara market, the primary challenge revolved around its legal status. This market occupies land located in two sub-districts, Balimester and Rawa Bunga. Following surveys and trader interviews, it became evident that Jatinegara traders could be categorized into three groups: street vendors along the sidewalks, kiosk traders in the Balimester area, and street vendors and kiosks beyond the bridge in the Rawa Bunga village. Only kiosk traders in the Balimester sub-district held business permits in the past, but these permits had lapsed by 2020. The remaining traders never possessed business permits.

Another complicating factor in communication at Jatinegara was the presence of the Laskar Merah Putih (LMP) community organization, which oversees the animal traders and has become an open secret among both traders and local residents. LMP was established in 2020 and holds legal status granted by the Ministry of Law and Human Rights (Kemenkumham). In East Jakarta, LMP's headquarters is situated in Jatinegara, where it exercises control over the Jatinegara Market. The LMP have associations to criminal gangs, which creates fear among some local

residents and makes open communication regarding activities associated with the market more difficult.

At Pramuka market, the main challenge lay in communicating with the market authority, PD Pasar Jaya. The slow response of PD Pasar to YIARI's request letters for discussions on implementing the One Health strategy caused significant delays. The complex organizational structure within PD Pasar Jaya, involving the Head of the Market, Manager of Operational Area 8, and PD Pasar Jaya Head Office, contributed to the slow and difficult decision-making process.

Given these challenges encountered in Jakarta, it is imperative to establish a robust communication strategy with stakeholders. As each stakeholder follows distinct communication patterns, a communication strategy serves as a valuable reference to determine the most efficient and effective approach when collaborating with various stakeholders. This approach should facilitate smoother interactions and more successful outcomes in the implementation of the One Health strategy.

We have taken steps to resolve the communication issues by asking for assistance from a senior lecturer at the University of Muhammadiyah in Jakarta. This lecturer, a specialist in communication, has worked for 10 years as a government communication consultant and is advising us on a more effective communication strategy for the implementation of this Project.

These issues encountered are not expected to affect our project's budget or timetable.

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

Discussed with NIRAS: and CR)	Yes (partially discussed in our previous reports
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Formal Change Request submitted:	No
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Received confirmation of change acceptance	N/A
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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 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.

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

N/A

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 planned 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**