

Darwin Initiative Main/Post/D+ Project Half Year Report (due 31st October 2017)

Project reference	22-008
Project title	Diversifying Indonesian fisheries to protect elasmobranchs and alleviate poverty
Country(ies)/territory(ies)	Indonesia
Lead organisation	The Wildlife Conservation Society – Indonesia Program
Partner(s)	Ministry of Marine Affairs and Fisheries (MMAF), Indonesian National Police – Criminal Investigation Division, Oxford University
Project leader	Hollie Booth and Ken Kassem
Report date and number (e.g., HYR3)	October 31 st 2017, HYR3
Project website/blog/social media etc.	programs.wcs.org/Indonesia

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

Output 1: Regulations for CITES-listed sharks and mantas have been developed or revised to ensure enhanced legal protection for at least four species

Activity 1.3: Hold meetings to strengthen policies and establish the protection status of CITES-listed Indonesian sharks and rays.

With co-finance support from USAID-BIJAK, several meetings and public consultations were held to the strengthen policy framework for shark and ray conservation. These included a discussion on a draft regulation concerning legal processes for regional implementation of the NPOA sharks in Bogor, West Java (May 12, 2017) attended by 13 participants from MMAF and Wildlife Conservation Society (WCS) (9 male, 4 female); a meeting to discuss the preparation of MMAF to become CITES Management Authority, held in Bogor (July 25-26, 2017) attended by 17 participants (5 female, 12 male); and two public consultations on draft regulations for mobula rays, silky sharks and thresher sharks (Activity 1.4)

Activity 1.4: Facilitate the development of species regulations and policies by MMAF, which identify management actions or changes to trade regulations (e.g. size restrictions).

WCS continued to support MMAF and the Indonesian Institute of Sciences (LIPI) [CITES Scientific Authority (SA)] to conduct a Non-Detriment Findings (NDF) study for hammerhead sharks, by providing scientific information, technical support and facilitating meetings to consolidate data. With co-finance from USAID-BIJAK, WCS facilitated the 2nd meeting on finalising the NDF on 26-27 May 2017, attended by 22 participants (8 female, 14 male) from MMAF, WCS and LIPI.

On September 28, 2017, MMAF submitted a draft NDF to LIPI for review. This will be used to determine whether the current export ban will be lifted, and develop appropriate trade control measures.

WCS also supported MMAF and LIPI to prepare the legal framework for implementing CITES for species up-listed to Appendix II at CoP 17 in 2016 (mobula rays, silky shark and thresher shark). Two regulations were drafted during the reporting period: a draft of ministerial regulation to ban export of *Mobula* spp. (*Mobula japanica*, *Mobula kuhlii*, *Mobula tarapacana* and *Mobula thurstoni*) and a zero-quota policy, for thresher shark, *Alopias* spp. (*Alopias pelagicus* and *Alopias superciliosus*) and silky shark (*Carcharhinus falciformis*). The Ministerial Decree for *Mobula* spp. has been submitted for review and approval by the Ministerial Working Unit (Unit Kerja Menteri) and signature from the Minister of Marine Affairs and Fisheries. The zero-quota policy has been agreed as a management measure, and a policy analysis document has been prepared for submission and review by the Legal Bureau of MMAF.

In addition, MMAF specifically requested technical support from WCS for developing standard operating procedures (SOPs) for overall shark trade traceability and CITES-implementation. WCS began drafting SOPs during the last reporting period, which will be reviewed, trialed and refined over the coming year (see also Activity 2.2).

Activity 1.5: Facilitate changes in the protection status of CITES-listed species, through changes to the national protected species list (PP.7/1999), Ministerial Decrees, or changes to regulations under the fisheries law.

WCS continued to support policy development for CITES-listed species through changes to Ministerial Decrees (see Activity 1.4) while also supporting a draft Ministerial Regulation concerning Utilization and Distribution for all Protected Fish Species and CITES-listed species, including sharks. This includes provisions for species protection, which will automatically apply to all CITES-listed species.

Output 2: Local government officials, traders and fishers have sufficient awareness and training in the new regulations and the applied management actions required to adequately manage shark and manta fisheries

Activity 2.1: Create awareness-raising materials and distribute regulations on CITES-listed shark and ray species in landing areas for sharks and rays.

At the specific request of the fisher community in Tanjung Luar (West Nusa Tenggara province), WCS produced posters and a banner to communicate regulations for fully-protected CITES-listed species in Indonesia (manta rays and whale sharks). The materials were designed by an Indonesian media organisation with input from the community. The posters are kept in the licence book of every fishing vessel, so that the fishers have a clear, official reference for which species they are permitted to catch. The banner is displayed in the landing site to clearly communicate species protection regulations to the whole fishing community. Following this, shark fishers in the village of Gili Maringkik requested the same banner to be displayed in their community, which WCS has agreed to provide.

Activity 2.2: Initiate regular joint meetings, workshops and training with MMAF local agencies, police, customs agencies to develop and implement regulations on CITES-listed shark and ray species.

WCS supported MMAF and LIPI to conduct a series of public consultations to develop specific regulations concerning the protection of CITES-listed sharks: one in Tanjung Luar, West Nusa Tenggara on June 12, 2017, attended by 41 participants (39 male, 2 female) and one in Banda Aceh, Aceh on July 27, 2017 attended by 30 participants (21 male, 9 female). These meetings were attended by fishers, traders and several governmental and non-governmental agencies including local government, provincial fisheries officers, MMAF Coastal and Marine Resource Management Units (*Balai Pengelolaan Sumberdaya Pesisir dan Laut*, BPSPL), police, customs and fish quarantine.

Several formal and informal meetings were conducted with Coastal and Marine Resource Management Units (BPSPL) offices in Denpasar, Bali; and Mataram, Lombok to discuss development of systems and protocols for traceability of shark and ray products for CITES-implementation. The formal meetings included two meetings with BPSPL Denpasar (April 2017 and June 2017, both with 16 participants: 2 female, 14 male). WCS developed a draft protocol for genetic testing of shark products, and MMAF have requested our support for developing a national-level system for monitoring and tracking shark and ray trade throughout the country, and for building capacity in species identification of monitoring units through visual ID and genetic testing. Species-specific trade data will support the development of fisheries and trade regulations for CITES-listed species, such as sustainable quotas, and enable verification of the legality and sustainability of shark and ray products. BPSPL Mataram have also established a 'hotline' for shark fishers to call, if they encounter or accidentally catch manta rays out at sea. It is anticipated that this will facilitate data collection on critical habitat for mantas, and support release of manta rays that become accidentally caught in fishing gears.

WCS prepared a technical report summarising data analysis and policy recommendations from Tanjung Luar landings data collection (Activity 5.2), which was submitted to provincial and district governments to assist with fisheries management planning. Following this, one formal meeting (conducted on 18th September in Mataram with 13 participants: 11 male and 2 female) and several informal meetings were conducted with the West Nusa Tenggara provincial government to present a summary of WCS's shark monitoring data and discuss findings and recommendations re. provincial-level fisheries management regulations.

Activity 2.3: Train fisheries middlemen and exporters to improve their knowledge on implementing regulations for CITES-listed shark and ray species.

WCS supported MMAF to conduct two public consultations to improve knowledge on new regulations for CITES-listed species in Aceh and Tanjung Luar (Activity 2.2). WCS also facilitated discussions between fishers, traders, middlemen and BPSPL Mataram in Tanjung Luar regarding forthcoming regulations, particularly for silky shark, as it makes up a significant proportion of the catch in Tanjung Luar. The aim is to establish a forum for regular discussions regarding shark trading issues, and build trust between different stakeholders and players in the trade chain.

Activity 2.4 Assess the impact of awareness-raising campaigns and training events using robust *Knowledge, Attitude, and Practice* surveys.

As previously reported, baseline Knowledge, Attitude, Practice (KAP) surveys were not conducted in Year 1 of the project as initially planned. Instead, indicators of knowledge, attitudes and behaviour for fishers and traders are collected in household socioeconomic surveys and direct observation of behaviour through overt and covert monitoring at landings sites, markets and through WCU investigations. For government officials, fines and prison sentences levied against illegal traders serve as an indicator of government's capacity, awareness and motivation to deal with marine wildlife crimes. A recent analysis of this data indicates a significant increase in fines and prison sentences for illegal wildlife traders since the beginning of this project and a significant decrease in landings of manta rays at our two case study monitoring sites: Tanjung Luar, West Nusa Tenggara and Lamakera, East Nusa Tenggara (see accompanying documentation). We will continue to monitor these indicators and incorporate them in a comprehensive end of project impact assessment.

Activity 2.5 Publish and disseminate law enforcement achievements.

During the reporting period, 16 media articles were published in the national and international media relating to shark and ray regulations and law enforcement achievements, examples include:

- Articles in Mongabay, Tamiang News and Indopos highlighting the arrest of an illegal manta ray traders in Lemongan in June 2017. E.g.:
 - <http://www.mongabay.co.id/2017/07/07/ott-di-lamongan-aparat-temukan-lebih-dari-2-ton-bagian-tubuh-pari-manta>
 - <http://tamiangnews.com/berita/2017/07/07/ott-di-lamongan-aparat-temukan-lebih-dari-2-ton-bagian-tubuh-pari-manta/>
 - <http://nasional.indopos.co.id/read/2017/07/09/103556/Wow-Insang-Ikan-Pari-Senilai-Rp-156-Miliar-Disita-Petugas-KKP>
- Articles highlighting WCS cooperation and collaboration with MMAF. E.g.:
 - <http://citraindonesia.com/kkp-dan-wildlife-conservation-society-sinergikan-data-hiu-dan-pari/>
- Articles highlighting shark and ray regulations, and MMAF's efforts to reduce illegal fishing of manta rays. E.g.:
 - <http://www.republika.co.id/berita/nasional/umum/15/06/13/ekonomi/makro/17/09/07/ovwlbj335-kkp-larang-nelayan-buru-hiu-dan-pari-manta>
- An Article in National Geographic highlighting WCS Indonesia's shark work in general, with specific reference to WCU trade enforcement:
<https://voices.nationalgeographic.org/2017/07/24/indonesia-shark-diaries/>

Output 3: A new “Marine Wildlife Crime Unit” has been established and is focusing on high-profile prosecutions of major manta/shark traders.

Activity 3.1 Create informant network to monitor shark and ray trafficking in key areas. Produce an assessment of the current trade networks.

The WCU's network of informants continued to monitor illegal shark and ray trade across 14 provinces, with intelligence data collated and analysed using IBM i2 software to provide an on-

going overview of trade networks.

Activity 3.2 Provide technical assistance and information for law enforcement officers in intelligence, surveillance, apprehension and processing of evidence.

The WCU continued to build capacity of Indonesian law enforcement officers to deal with wildlife crimes with 7 trainings conducted for a total of 168 individuals. The trainings included:

- 1 x 5-day training workshop in *Basic Skill and Intelligence for Wildlife Law Enforcement* in Manado (10th-14th July, 16 participants)
- 4 x 1-day training workshops in *Aviation Security to Prevent Wildlife Smuggling* conducted at:
 - Sultan Syarif Kasim II International Airport, Riau (6th September, 20 participants)
 - Kualanamu International Airport, Medan (12th September, 36 participants)
 - Minangkabau International Airport, Padang (19th September, 34 participants)
 - Supadio International Airport, West Kalimantan (25th September, 17 participants)
- 2 x 3-day training workshops on *In House Training: Capacity Building of Public Prosecutors in Handling Illegal Protected Wildlife Trade Cases* conducted in:
 - Yogyakarta (7th-10th July for 20 public prosecutors from Yogyakarta and Central Java and 5 investigators from the Indonesia National Police)
 - Manado, North Sulawesi (27th – 29th July for 20 public prosecutors from North Sulawesi and East Java.)

The WCU continued to directly support Indonesian law enforcement agencies to investigate, arrest and prosecute illegal shark and ray traders with one major case in Lamongan, East Java involving two suspects arrested with 135 manta ray gill plates (5kg).

Activity 3.3 Assist the law enforcement officers to complete legal documents for each trafficking case, and maintain strong communications with prosecutors and judges to ensure that all cases are processed and adjudicated promptly and in accordance with law

The WCU continued to support legal processes, through training for public prosecutors (Activity 3.2) and directly supporting legal cases. One major case from 2016 was completed, with a trafficker who was apprehended in 2016 attempting to smuggle 1,845 kg of hammerhead shark fins receiving ~\$US37,000 in fines and a 24-month prison sentence.

Activity 3.4 Support MMAF and the Attorney General's Office to develop a tracking database, to record information on marine species crime cases, action taken by Indonesian law enforcement agencies, and the results (arrests, prosecutions, fines, etc.).

The WCU continued to maintain a comprehensive tracking database recording information on dates, locations, crime type, suspects, species and wildlife products seized, evidence, and case results including sentence durations and fines levied. The database continues to be shared with MMAF, the Attorney General's Office and other relevant partners.

Activity 3.5 Produce an assessment of how trade networks have changed after three years of enforcement.

A preliminary report on the impact of the WCU on illegal shark and ray trade in Indonesia was developed in September 2017. We intend to update this report using monitoring data from the

final period of the project, and incorporate analysis of law enforcement data conducted in partnership with Oxford University (see Activity 5.6), to develop a comprehensive end of project impact assessment.

Output 4: At least 50 individuals in shark fishing communities have reduced barriers to entry for engaging in non-elasmobranch related economic opportunities, and support structures are in place to promote long-term sustainable fisheries management

Activity 4.2: Support the development of community institutions to promote livelihood diversification, community empowerment and sustainability

WCS community engagement officers assessed existing community institutions in Tanjung Luar to identify opportunities for providing support to promote sustainability in the community. WCS identified an existing cooperative, *Koperasi Usaha Wisata Bahari* (Cooperation for Marine Tourism, KUWB), which focuses on sustainable marine tourism. The objective of the KUWB is to support the development of small-scale tourism products in the area (boat trips to nearby beaches and selling souvenirs) and provide a system for savings and loans, however it currently lacks resources and organisational capacity. WCS has begun supporting the formalisation of the cooperative, development of rules and regulations, and capacity building for microfinance/financial management. In particular, a 3-day training workshop was conducted on 16-18th September by *Credit Union Bahtera Sejahtera* on developing capacity for micro-finance, along with an exchange visit from a member of *Kooperasi Pade Mele*, an established microfinance cooperative in Gili Air, to discuss experiences and lessons learned from the cooperative. WCS staff members have also been providing informal training for accounting/book-keeping. Presently, the KUWB has 35 members, including 5 women and 11 ex-shark fishermen, and has been approved as a legal entity by the district government but is still awaiting official documentation.

Activity 4.3: Facilitate the development and adoption of non-elasmobranch related economic opportunities through community institutions that help to reduce barriers to adaptation

Through building the capacity of KUWB to provide savings and loans (see Activity 4.2), WCS is helping to establish a system which provides capital for developing non-elasmobranch enterprises, and therefore reduces barriers to adaptation. Under the current rules and regulations of the KUWB, individuals must be engaged in sustainable marine tourism to become members of the cooperative and have access to savings accounts and loans. KUWB is in support of protecting the marine environment and WCS has suggested making access to capital conditional on members adopting a sustainability code of conduct, which would include no shark fishing, and provide incentives for developing other enterprises.

Activity 4.4: Promote concepts of sustainability and environmental management through community institutions

On Indonesian Independence Day WCS supported the Tanjung Luar community to organise an event under the theme *Laut Sahabat Kita* (The Sea is our Friend) to promote concepts of sustainability and build local pride in the marine environment. The event included beach cleaning, during which 1.3 ton of marine debris was cleared from the beach, a drawing competition for local children, entertainment and story-telling. WCS is now exploring options for developing and

incentivising more regular beach cleaning, as marine debris has been identified as a major problem in the community. We have begun discussions with *Bank Sampah*, *Asosiasi Daur Ulang Plastik Indonesia* (Association for Plastic Recycling, ADUPI), BPSPL Mataram (who already have an established marine debris program in Gili Matra), KUWB, and local youth groups to exchange ideas.

Activity 4.5: Facilitate communication between communities and government to enable community participation in development planning processes

WCS have continued to play a role in facilitating communications between the community and district and provincial government. In particular, community involvement in infrastructure development plans, tourism development plans and fisheries management plans. The West Nusa Tenggara provincial government are developing a masterplan for the revitalisation of Tanjung Luar port, and investment in new infrastructure. WCS are supporting the Tanjung Luar community to be involved in this process, and have been planning a coordination meeting between community representatives and provincial government, so that community can input their needs and priorities to this process. The East Lombok district government are interested in supporting tourism development in the area, and we are facilitating KUWB and the community to have a voice in this process. Finally, as discussed in activity 2.2, WCS is supporting community involvement in the development of provincial-level fisheries management regulations for sharks.

Activity 4.6: Information exchange and learning events to spread awareness about the project approach and encourage other manta/shark fishers to also begin to transition to other livelihoods.

During the reporting period WCS continued to collaborate with MDPI and Misool Foundation, and began building new partnerships for information exchange programs with *Kooperasi Pade Mele* and *Bank Sampah*.

Output 5: The conservation and social outcomes of the project are evaluated.

Activity 5.1: Conduct monthly shark and manta fisheries catch surveys at target sites.

In West Nusa Tenggara, WCS continued to record daily elasmobranch landings in Tanjung Luar, Lombok; collate the data in to a comprehensive landings database; and, summarise the data on an open access website (<http://www.data-ikan.org/hiu/>). A detailed report analysing the state of the fishery was developed during the reporting period, along with practical recommendations for sustainable fisheries management interventions. The findings are being used to advise provincial government on fisheries regulations (Activity 2.2) and have been summarised in to a draft scientific article, which will be submitted to an international peer-reviewed journal.

In Aceh, WCS continued monitoring landings at three sites: Lampulo, Banda Aceh; Meulaboh, West Aceh and Rigaih, Aceh Jaya. In East Nusa Tenggara, WCS continued monitoring manta ray landings and trade in Lamakera through the WCU's informant network and our partner NGO, Misool Foundation.

Activity 5.2: Undertake surveys, analyse and assess changes in shark and ray catch landings, prices and demand in response to changes in stakeholder knowledge and capacity, law enforcement and awareness raising activities.

WCS continued to gather data on gross revenue from shark fishing trips in Tanjung Luar, and

monitor the price of shark and ray products in local markets. The WCU continued to gather data on trading prices for illegal shark and ray products during investigations and operations. Based on the framework and methodologies developed in year 2 of the project, WCS have continued to assess changes in landings and onward trade of manta rays. The findings of the framework development and impact assessment will be incorporated in to a peer-reviewed journal article.

Activity 5.4: Conduct socioeconomic surveys of fisher behaviour and household well-being and occupational status in years 1 and 3, for intervention and control households.

The year 3 follow-up survey is currently being planned for the final 6-months of the project.

Activity 5.5 Analyse and assess changes in fisher behaviour and household well-being and occupational status in response to the livelihoods transition intervention.

Changes will be assessed once follow-up survey data has been collected.

Activity 5.6: At least one peer-reviewed paper produced in partnership with Imperial, by Indonesian scientists undertaking visiting research fellowships at Imperial.

As noted in previous reports, a peer-reviewed paper will be produced in partnership with the University of Oxford, due to project partner Professor EJ Milner-Gulland moving from Imperial to Oxford. At the end of September, two WCS Indonesia staff members, Peni Lestari (Socioeconomic Specialist, Marine Program) and Yunita Setyorini (Intelligence Analyst, Wildlife Crimes Unit) began visiting research fellowships at Oxford University to build their capacity in data analysis and scientific writing; apply new skills to analyse datasets developed under this project; and prepare draft manuscripts in partnership with Oxford academics. Peni is working with the Interdisciplinary Centre for Conservation Science (ICCS) to analyse the socioeconomic survey data collected in Tanjung Luar, while Yunita is working with the Oxford Internet Institute and the Durrell Institute of Conservation and Ecology (DICE) and University of Kent under the Oxford Martin Program on Illegal Wildlife Trade to analyse physical and online trade networks for sharks and rays using intelligence and law enforcement data, and assess how they've changed over time.

2a. 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.

A number of challenges and lessons learned were identified in the 2017 Annual Report, and WCS requested a change to the original project outputs and logframe on 2nd August 2017, which were approved on 14th August 2017.

2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?

Discussed with LTS: Yes

Formal change request submitted: Yes

Received confirmation of change acceptance	Yes
--	-----

3a. 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: £

3b. 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 rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget so please ensure you have enough time to make appropriate changes if necessary.

4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?

N/A

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document. Additionally, if you were funded under R23 and asked to provide further information by your first half year report, please attach your response as a separate document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also** be raised with LTS International through a Change Request.

Please send your **completed report by email** to Eilidh Young at Darwin-Projects@ltsi.co.uk . The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g. Subject: 22-035 Darwin Half Year Report**