



Illegal Wildlife Trade (IWT) Challenge Fund Annual Report

To be completed with reference to the "Writing a Darwin Report" guidance: (http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2019

IWT Challenge Fund Project Information

Project reference	IWT057
Project title	Building capacity to reduce illegal trade of shark products in Indonesia
Country/ies	Indonesia
Lead organisation	Cefas
Partner institution(s)	Ministry of Marine Affairs and Fisheries (MMAF), Wildlife Conservation Society, University of Salford
IWT grant value	£ 353,832
Start/end dates of project	01/07/2018 - 31/03/2021
Reporting period	July 2018 – March 2019: Annual Report 1
Project leader name	Joanna Murray
Project website/blog/social	Blog - https://marinescience.blog.gov.uk/
media	Social media – <u>@Joanna M Murray</u> and <u>@cefasgovuk</u>
Report author(s) and date	Joanna Murray, Martha Silalahi, Hollie Booth, Firdaus Agung, Efin Muttaqin, Yoga Dewanto

1. Project rationale

Indonesia is the world's largest shark fishing nation and the third largest trader in shark and ray (elasmobranch) products (e.g. fins). It is also a country with a fishing industry dominated by small-scale vessels and where people have a high dependency on fisheries products to support livelihoods and food security. As such, it is a global priority for elasmobranch management and conservation. With the up-listing of several species of elasmobranch to CITES Appendix II at COP16 and 17, it has become increasingly difficult for Indonesian authorities to identify and monitor CITES-listed species in trade and ensure that use is sustainable. Unless capacity for species-specific monitoring improves, there is a risk that unregulated trade could threaten CITES-listed elasmobranchs with local extinction.

The Ministry of Marine Affairs and Fisheries (MMAF) have acknowledged that the greatest challenge for product traceability and CITES implementation is species identification, especially where partially-processed products (e.g. fins, meat, gills) make it difficult to determine source and legality. Through advanced training programs and improved customs procedures, this project is working to increase the capacity of monitoring and enforcement agencies to identify CITES-listed elasmobranchs in trade. This in turn will strengthen law enforcement by increasing the detection probability and prosecution rate of IWT, therefore deterring the unregulated targeting and trade of protected species.

The project is being implemented throughout Indonesia, with coordinating government staff based in Jakarta, and technical verification teams at six regional government (BPSPL) offices (Denpasar, Makassar, Padang, Pontianak, Serang and Sorong) (Figure 1...

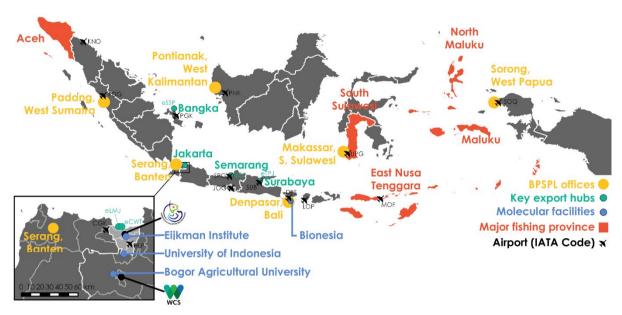


Figure 1. Location of project implementation areas including the coordinating MMAF office in Jakarta and six regional BPSPL offices (Denpasar, Makassar, Padang, Pontianak, Serang and Sorong) throughout Indonesia (figure taken from desk-based study, activity 1.1).

2. Project partnerships

In 2015, a UK-Indonesia Government to Government Maritime MoU was initiated and one area of collaboration was the desire to 'cooperate in sustainable management of marine fisheries resources'. This IWT Challenge Fund project developed between MMAF and Cefas through their implementing arrangement under that MoU. MMAF introduced WCS as a partner prior to project design due to their ongoing collaboration (since 2003) to combat illegal wildlife trade and Professor Stefano Mariani at the University of Salford was identified as an academic partner with world-leading expertise in conservation genetics. Nominated leads from all partner organisations were actively involved in the design of the project during the application stage, communicating regularly including through a project WhatsApp group. They have shown a personal investment and dedication to ensuring the project is a success and have been instrumental in conducting engagement activities during year one. A formal Collaboration Agreement between all partners was drawn up in the six months following the award of funding and signed in December 2018 (Supp info 1 – Collaboration Agreement).

Year one activities involved a range of relevant government departments, technical specialists, research scientists and non-government organisations. At the Project Inception Workshop (14th and 15th November 2018), representatives attended from government departments including; Marine and Coastal Resources Management Agency (BPSPL), Directorate General (DG) of Marine Spatial Management (DJPRL), DG of Marine and Fisheries Resource Surveillance (PSDKP), DG of Customs, Ministry of Finance, Fish Quarantine Inspection Agency, Marine Research Centre Fisheries Research Centre; and research centres and NGOs including; Oceanography Research Centre, Indonesian Institute of Sciences (P2O LIPI), the Wildlife Conservation Society and Conservation International. Staff from BPSPL offices and local exporting individuals and companies were involved in regional focus groups which took place at each of the six BPSPL offices between January and March 2019 (Figure 2b, c).



Figure 2. Photographs taken during the Project Inception Workshop (a), during regional focus groups at BPSPL offices (b) and at exporter facilities (c).

International research specialists from organisations including universities, the Manta Trust, the Shark Trust, WWF, FAO and the Bloom Foundation, have been engaged with during the scoping phase of the project through emails and conferences calls to encourage knowledge sharing. Quarterly "corkboard" newsletters have been produced and are shared with this network, providing project updates and sustaining engagement.



Figure 3. Quarterly corkboard newsletters sent to a network of international research specialists.

3. Project progress

3.1 Progress in carrying out project Activities

Planned activities for this year largely focused on achieving Output 1. The first few months of the project provided a period of scoping and networking with stakeholders beyond the project team. Knowledge exchange with over 40 international research specialists (detailed in section 2) and a literature review was undertaken to compile relevant information on shark and ray trade as a reference document for the project team (Activity 1.1), and to gather existing learning resources on elasmobranch identification methods (Activity 2.1). This information is presented within the desk-based study report (Supp Info 2, desk-based study).

As soon the project funding was awarded, Cefas and the University of Salford drafted the PhD studentship advert (



Figure 4) which was promoted on social media and during the 5th International Marine Conservation Congress in Sarawak (June 2018). The position was awarded to Andhika Prasetyo who moved to UK in January 2019 to begin study. In February 2019, the supervisory team (Prof Mariani and Dr Murray) and Hollie Booth from WCS met with Andhika in Salford to discuss his research PhD proposal (



Figure 4).

Since commencing study in January, Andhika has finalised his learning agreement (Supp Info 3, Learning Agreement), submitted an abstract titled "The rationality behind mismatch between landings and market trends of shark and ray products in Indonesia" for the Salford Postgraduate Annual Researcher Conference, applied for a Material Transfer Agreement for the transport of tissue samples from Indonesia to the University of Salford for analysis, and collaborated with another member of Prof. Mariani's research group on an MSC grant application for additional funding support. The first PhD peer-reviewed publication is being drafted and focuses on the current status of Indonesia's shark and ray trade (Learning agreement section 3, objective 1) (Activity 1.2).



Figure 4. PhD studentship advert for promotion on social media and a photograph taken during our first supervisory team meeting in Salford in February 2019.

Delivery of the Project Inception workshop in Jakarta (Activity 1.6) and Regional Focus Groups at three key trade hubs (Activity 1.7) were undertaken during the third and fourth quarter of year one as planned (Figure 2). Over fifty key stakeholders were identified and invited to the workshop by MMAF (Activity 1.3, 1.5) using an agenda and letter of invitation which was IWT Annual Report Template 2019

designed collaboratively by Cefas, MMAF and WCS (Activity 1.4, Supp Infor 4). Forty-seven stakeholders attended the workshop on the 14th and 15th November 2018 (Supp Infor 5, attendance record) for a series of presentations and group exercises (Figure 5) (workshop minutes, Supp Info 6).

"The project-kick off workshop was impressive in terms of participants and outputs. It brought together more than 40 stakeholders from customs, quarantine, research institution, sharks and ray verifications, WCS, fishery surveillance directorate, as well as the fish resource management directorate, to discuss shark and ray trade as well as project direction.

This mixture of key participants had an active discussion during the group discussions and succeeded to yield some important recommendations for the project to intervene in the shark and ray trade and conservation in Indonesia." Hadi Yoga Dewanto, MMAF.



Figure 5. Examples of social media promotion during the Project Inception Workshop in November 2018.

Prior to the three planned regional focus group (Activity 1.7), opportunistic visits to two BPSPL offices (Serang and Denpasar) were undertaken by MMAF and Cefas in November. These visits informed the design of a more detailed questionnaire on the inspection process which guided regional focus group discussion (Supp Info 7, Questionnaire,). The three planned focus groups were conducted by MMAF, Cefas and WCS in January 2019. Due to efficiencies in the project additional time were made available and WCS and MMAF were able to visit the three remaining hubs in February and March 2019 and provide information for all six trade hubs.

Information gathered during the stakeholder workshop (Activity 1.6) and regional focus groups (Activity 1.7), including the completed questionnaires and meeting minutes, were used to produce a consultation document (Activity 1.8) which provides a single reference for protocols, challenges and developments that each of the six BPSPL offices have reported (Supp Info 8, Consultation document). It summarises this information, provides training and implementation priorities and recommendations for how this project can address some of the challenges raised. The document is currently under review and consultation (Activity 1.9) with the view to have it signed off (Activity 1.10) within the first quarter of year two for use as terms of reference by the Elasmobranch Trade Training Team.



Figure 6. Examples of social media promotion during the opportunistic visits to BPSPL Serang and Denpasar in November 2018.

Progress towards year two activities has been made. MMAF and WCS have begun the formulation of the Elasmobranch Trade Training Team (Activity 2.3) by engaging with the MMAF Training Centre and Utilisation Department (4th March 2019, 8th April 2019) to discuss; the participants of the training group, identify next steps to ensure the training is in line with the government training structure, and to review what modules currently exists (Supp Info 9, meeting minutes). Placeholders for identification training (Activity 2.5) are also in place with a planned molecular sampling campaign planned for November and December 2019 (months which have high volumes of trade due to Chinese New Year) and advanced visual identification workshops in late summer after COP18. In addition, WCS met with customs officers on January 31st 2019 to plan their training workshops (Activity 3.1).

3.2 Progress towards project Outputs

Output 1. A comprehensive understanding of the political and operational landscape of elasmobranch trade has been documented, including the identification of all key stakeholders, their resources and unification of commitments to reducing illegal trade.

The Project inception workshop brought together 47 key trade stakeholders (BPSPL verification staff, customs, quarantine and surveillance), to discuss, for the first time, the political and operational challenges they face in effectively managing Indonesia's shark and ray product trade. This generated some "lively discussion" (Figure 5) including; how we define the legal and illegal aspects of the trade, how there are gaps in current trade regulations and poor communication regarding the existing ones among the technical ministries, and how there are currently no designated export points which makes international export difficult to manage (Supp Info 6, workshop minutes). The current institutional setting for the management of shark and ray trade in Indonesia was also discussed. The Ministry of Environment and Forestry is the single Management Authority for CITES in Indonesia. However, in practice it is the MMAF and Technical Implementing Units that are managing the trade, especially in relation to in-country distribution and specimen identification. Stakeholders discussed the issue of a Minister Decree No. 61/2018 that sets out the regulation for all aquatic species (protected and listed in CITES) utilization, including for trade, submitted by MMAF. With representatives in attendance from across Indonesia's trade management we were able to map trade structure and governance from the point of capture through to export (Supp Info 8, supply chain organogram).

Regional focus groups were incredibly useful for building a comprehensive understanding of region-specific challenges and the practical interventions which local BPSPL offices have developed to improve shark and ray trade management. One example of this is the development of in-house resources, such as a web-based application for generating and

storing the required documentation for export called the Letter of Recommendation. Two BPSPLs are currently using a bespoke online system, one office is in the testing stages of implementing an online system, and three offices are using a paper-based system (Supp Info 8). Other developments include visual species identification guides, posters and leaflets to educate traders and exporters and databases for storing information derived from the Letter of Recommendation process. Documentations and consolidation of these localised resources in the consultation document highlights the opportunity this project has for streamlining processes across Indonesia through improved sharing of knowledge and resources.

The comprehensive understanding of the operational landscape gained from successfully achieving Output 1 has shaped the design of the Elasmobranch Trade Training Team (Activity 2.3). The training team will now have representation from the technical staff at each BPSPL on the team, along with customs, quarantine, surveillance and chaired by MMAF. This is to ensure that we maximise the knowledge sharing and improve coordination of all BPSPL offices.

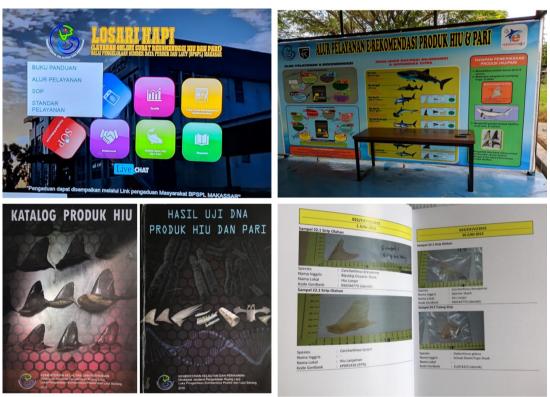


Figure 7. Examples of regionally developed resources which have been gathered under Output 1 including "Losari Hapi" web-based application, educational poster and species identification visual guides.

Output 2. Improved capacity of MMAF to deliver advanced, on-going training to effectively identify and monitor the trade of CITES-protected elasmobranch species, thereby increasing the detection rates of attempted illegal trades.

For MMAF to deliver advanced and on-going training, it is important that the Elasmobranch Trade Training Team has the correct representation from staff currently involved in the product inspection process and who are best placed to disseminate the training they receive across the Indonesia. The information generated in Output 1 has provided us with the information to ensure this happens. The training team is currently in the process of being formed and officialised within the existing MMAF Training Centre structure. This is an important step to ensure the team has the required backing to influence national training modules, training standardisation and certification, which staff across the trade management will be required to adhere to.

Verification staff from technical implementing units reported that they feel they currently have skills and experience to identify shark and ray products but during the engagement activities, staff reported a desire for advanced training. This training will be delivered by international shark and ray ID experts during year two as detailed in the project workplan. However, some

complementary identification training has been conducted by WCS during the year through matched funding from other donors:

- 1. Shark and ray identification methods for CITES implementation, 27th 29th November, Jakarta with over 30 government representatives from MMAF technical units, surveillance, customs, quarantine and several research institutes. Training provided an introduction to visual and genetic techniques for identifying shark products in trade, with a focus on CITES-listed species.
- 2. Coral Triangle Initiative Regional training on shark and ray identification, 25th 27th March, Lombok, West Nusa Tenggara. At the specific request of MMAF and the secretariat of the Coral Triangle Initiative (CTI) WCS supported the government to host a 3-day workshop on shark and ray species identification for landings/fishery monitoring. The training hosted 15 government participants from six Coral Triangle Initiative countries: Indonesia, Malaysia, the Philippines, Timor Leste, PNG and the Solomon Islands. As well as providing technical capacity building, the workshop also served as an opportunity to foster regional collaboration regarding data sharing (on fisheries, and legal/illegal trade), research, and overall management of shark fisheries and trade.

Output 3. Improved capacity for law enforcement agencies to effectively respond to incidences of illegal trade using evidence-based approaches creates stronger disincentives for illegal trade of elasmobranch products.

As detailed in the project workplan, activities under this output are not scheduled to begin until year two. However, on 31st January 2019 a coordination meeting between WCS and the customs agency was conducted in Jakarta. Training workshops scheduled for year two was discussed and five areas which will be targeted as training locations were agreed: Customs of Ngurah Rai Airport, Denpasar; Soekarno Hatta International Airport, Jakarta; Tanjung Priok Seaport, Jakarta; Tanjung Perak Sea Port, Surabaya and Hang Nadim Airport, Batam.

In addition, some progress has been made under this output by WCS's Wildlife Crime's Unit (WCU). They have collated, analysed and disseminated intelligence data on illegal wildlife trade – including for sharks and rays –to inform pro-active law enforcement actions. This has led to one high profile shark/ray case during the project period, with the arrest of an illegal manta ray trader in Larantuka, East Nusa Tenggara on 1st October 2018. The suspect was apprehended with 16kg of manta ray gills and received administrative sanctions (Figure 8). The arrest was publicised in the <u>national media</u>, thus promoting a strong conservation message, and acknowledging the government and enforcement agencies in their efforts to tackle wildlife crimes.



Figure 8. Seizure of 16kg of manta ray gills in Larantuka, East Nusa Tenggara on 1st October 2018.

Output 4. MMAF have increased capacity to utilise their improved scientific evidence from the implementation of the step-wise detection methods to better inform national policies on elasmobranch trade management and CITES compliance.

Progress towards achieving this objective will be made during the final quarter of year two and throughout year three.

3.3 Progress towards the project Outcome

All planned activities for year one have been successfully completed as well as advanced progress made on delivering activities planned for year two, demonstrating the project is on track to ensuring "Indonesia has capacity to effectively trace, monitor and control trade in sharks and rays to support CITES legislation and provide a risk-based approach to legal and sustainable resource use".

3.4 Monitoring of assumptions

Success in achieving planned activities in year one assumed that we would have active engagement from project partners, relevant government departments and the wider international network of stakeholders involved in the management of the shark and ray trade. This assumption has held true; participants at the workshop and focus groups have shared local knowledge, resources, and opinions, field officers are eager to receive advanced species identification training and to improve the quality and transparency of the data they collect. Similarly, consultation with international identification and genetic experts has been positive with the sharing of visual ID guides for translation, early discussion on the design of training workshops, and through the delivery of the WCS ID workshop in November. Good engagement which we have experience during year one has been supported by the generation of local, national and international media interest by actively reporting project activities on social media including Twitter and Blogs.

4. Impact: achievement of positive impact on illegal wildlife trade and poverty alleviation

Strengthened monitoring and enforcement of elasmobranch trade decreases illegal wildlife trade, reduces exploitation of threatened species, and promotes sustainable management of fisheries, safeguarding biodiversity and livelihoods through improved legal frameworks.

Improved management of shark fisheries and trade at the national-level, and successful implementation of existing shark/ray regulations (e.g. protection of manta rays and whale sharks) will help to better protect livelihoods and food security for small-scale fishers, who are highly dependent on marine resources for their well-being. It is hoped that the increase in publicity of illegal trade in marine species, like the case of the manta gills (section 3.2, Output 3), will support and raise public awareness about the strengthening of management systems and illegal trade detection. However, the benefits of this will be difficult to measure within the life time of this project and will not have yet been realised during year one.

5. Project support to the IWT Challenge Fund Objectives and commitments under the London Declarations and Kasane Statement

During year one of the project, progress has been made towards ensuring effective legal frameworks. Key to this is an understanding of how trade is managed within the existing framework and how our project can support this framework or provide recommendations for positive change to make it more effective. Translation into English of the Minister Decree No. 61/2018 that sets out the regulation for all aquatic species (protected and listed in CITES) during year one will ensure that going forward we can provide the best advice to ensure we are continuing to support effective legal frameworks.

6. Impact on species in focus

Year one of the project was primarily a period of stakeholder engagement and identification of the key challenges and priority interventions. Training designed to improve the identification of species in focus will be run in year two and as such, species-level data resulting from increased capacity and improved customs procedures is not yet available.

7. Project support to poverty alleviation

While our project is focused on strengthening law enforcement and ensuring effective legal frameworks and not directly on alleviating poverty, it will provide the Indonesian Government with the tools needed to manage marine resources in line with international commitments of CITIES-legislation. This in turn will provide additional support towards improving Indonesia's sustainability objectives, including advice on stock assessments, quotas and applicability of non-detriment findings in the future, promoting sustainable elasmobranch fisheries, therefore safeguarding biodiversity and livelihoods.

8. Consideration of gender equality issues

The Cefas, MMAF and WCS teams working on this project are of mixed genders, and throughout the first year of this project we have also been successful in ensuring that the stakeholders we have engaged with have been represented by both men and women (Table 1, attendance records, supp info 5, 9, 10). During the design of our project, we anticipated that we might see fewer women attend the centralised workshop in Jakarta due to family commitments restricted travel. To mitigate this, the regional focus groups provided another platform for the project to engage with these staff members more locally, and indeed we did see increased attendance by women. At three of the six regional focus groups we have higher numbers of women attend.

Table 1. Composition of	genders at engagement	t activities during vear 1.

Activity	Female	Male
Project Inception workshop	16	31
Focus group – Satker Jakarta	10	6
Focus group - Denpasar BPSPL	3	8
Focus group - Makassar BPSPL	7	6
Focus group - Pontianak BPSPL	1	3
Focus group - Loka Sorong	7	9
Focus group - Satker Medan	4	2

9. Monitoring and evaluation

Cefas follows ISO9001 project management structure. As part of this commitment, we have implemented fortnightly project management and budgeting meetings between project lead and Cefas PM and have regular partner communication via email, WhatsApp and Skype. This ensures that monitoring of activities and associated expenditure is tracked closely throughout the project.

Attendance records, workshop minutes and visit reports, photographs and media engagement (see supp info) have successfully been used to monitor and evaluate activities undertaken during year one. Information derived from these means of verification have then been used to develop the consultation document (activity 1.8) which sets out the status quo, identifies opportunities for knowledge and resource sharing and defines training needs. The report is currently under partner review and will be consulted on by stakeholders during the first quarter of year two. Achieving stakeholder consultation and sign off will provide a good measure of the success of year one's engagement activities as are the testimonies of the value of the project's activities like the one in section 3.1.

10. Lessons learnt

Key to the success of our project so far is the shared commitment by all partners in delivering the project plan. The Indonesian government were instrumental in the project design and are therefore fully committed as it meets their priorities and needs. The activities also integrate with and build on their existing institutions and capacities rather than reinventing the wheel. Similarly, this has also been our approach with planning species identification training. We have engaged with international experts who deliver advanced ID training around the world to learn from those examples where it has worked well, by selecting and translating existing visual ID guides, and by engaging with practitioners in Hong Kong who are the first to use molecular approaches to species identification at importing facilities.

The stakeholder engagement period in year one has allowed us to refine the planned interventions for year two, whilst at the same time getting buy-in from the technical implementing staff who will be key to the on-going success of changes to customs procedures. We would recommend that others undertaking similar projects have strong existing in-country engagement, trust and understanding and that the intended outputs of their project match their partners priorities and needs. This is something we will continually improve upon throughout the project by supporting the Elasmobranch Trade Training Team to take ownership of the improved customs procedures and by ensuring the project looks outwards to learn from what others are doing globally to improve management of their shark and ray trade.

Our project partnership was formalised by a Collaboration Agreement. This took significantly longer to finalise than expected as it involved members of the Cefas business team meeting with the Indonesian government to discuss the terms in detail. The delay in signing the agreement meant that the transfer of funds to partners was delayed as was the hire of a WCS project coordinator. However, all partners were able to continue working on the project with WCS staff covering the project coordination role. In the future it would be advisable to begin discussion of the terms of the Collaboration agreement in advance of receiving project funding.

11. Actions taken in response to previous reviews (if applicable)

Not applicable.

12. Other comments on progress not covered elsewhere

Project progress has been fully covered in the sections above.

13. Sustainability and legacy

A project communication strategy was designed to promote the profile and gain public interest in the project. This includes the creation of a project blog series (https://marinescience.blog.gov.uk/), the use of Twitter to generate interest during key activities and to promote the blog, and discussion with the Defra IWT communication team on promoting the project going forwards. The project also gained profile when it was announced alongside UK commitments at the Our Oceans global summit in October 2018.

Our exit strategy has been strengthened now the project is running. We are confident that we now understand who needs to be represented on the Elasmobranch Trade Training Team to ensure its long-term success and we are in the process of integrating the team within the current government structure to ensure it has institutional backing. Furthermore, the Minister Decree No. 61/2018, which is critical for the implementation and continuation of project outputs has been issued. The decree has been translated in English during the year one of the project to allow all project partners to ensure we are working alongside this piece of legislation.

Andhika, the PhD student, was a member of staff within the MMAF. This meant that Andhika already had an excellent knowledge base on the current shark and ray trade in Indonesia, and importantly, on completion of his PhD plans to return to Indonesia and his position in MMAF to share the knowledge and expertise he develops.

14. IWT Challenge Fund Identity

We have ensured that the UK Government funding logo has been used in project presentations (Figure 9), meeting invites (Supplementary information 4) and workshop banners (Figure 2). We have also included the @Darwin_Defra tag in select Tweets (see Figure 5 as an example) and will ensure all Tweet include the IWT Challenge Fund tag when it becomes available.



Figure 9. Presentation title page from the Project Inception Workshop.

15. Project expenditure

Project spend (indicative since last annual report	2018/19 Grant (£)	2018/19 Total actual IWT Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
TOTAL				

16. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes

I agree for the IWT Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here)

This award of this project was included in the list of UK commitments that were announced at the Our Oceans global summit in Bali, October 2018. The project was seen as a strong example of UK-Indonesia collaboration around a pertinent issue as a direct deliverable under the Government to Government Maritime MoU. The Our Oceans conference saw the convening of global leaders with a shared focus of achieving sustainability in the management of our oceans and was therefore a fitting platform to publicise the start of this programme of work.

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2018-2019

Project summary	Measurable Indicators	Progress and Achievements April 2017 - March 2018	Actions required/planned for next period
Impact Strengthened monitoring and decreases illegal wildlife trade, reduct and promotes sustainable management biodiversity and livelihoods through in	es exploitation of threatened species, ent of fisheries, safeguarding		
Outcome Indonesia has capacity to effectively trace, monitor and control trade in sharks and rays to support CITES legislation and provide a risk-based approach to legal and sustainable resource use.	0.1 By end of year one, a key partner workshop has been delivered in Jakarta, engaging with >25 key elasmobranch trade stakeholders, including governmental bodies, academic experts, regulatory bodies and representatives from regional NGO's, identifying the interventions necessary to improve elasmobranch trade monitoring processes. Three local focus groups will be run in Jakarta, Semarang and Surabaya to collate input from fishers, processors and traders.	In November 2018, 47 key trade stakeholders attended the project inception workshop in Jakarta (Supplementary Information 4, 5, 6) and the project partners conducted visits to all six regional hubs to gather information on Indonesia's shark and ray trade.	Consult stakeholders, finalise and sign off the consultation document which consolidates information gathered during stakeholder engagement activities conducted in year one.
	0.2 By the end of the project at least 15 individuals from MMAF have been successfully trained in elasmobranch identification techniques, with a significant increase in accurate identification of products of all trained staff in comparison to Y1 baselines.	The Elasmobranch Trade Training Team is currently being formed and officialised within the government training structure and international species identification experts have been contacted regarding the delivery of training.	 Contract with international experts to deliver the species identification training. Include a pre and post assessment of staff ID capability within the ID course.
	0.3 By the end of the project, increased capacity and efficiency of MMAF and law enforcement officers increases prosecution rate of illegal shark and ray traders (and reports to CITES committees), as determined against baseline data (7 cases 2015, 6 cases in 2016, 2 (large) cases in 2015).	Initial discussion with law enforcement officers and customs agents have taken place to plan year two trainings on detecting illegal trade of marine species. Key training locations have been identified. In addition, WCS Wildlife Crime Unit have supported the	 Conduct training of customs officers in species identification protocols for at least four major exit ports. Continue to establish the informant network for marine species and

		Indonesian government to stop trade of 16kg of manta gills during year one.	begin to collate and analyses the data.
	0.4 By 2020, a five-year plan is delivered to MMAF outlining recommendations for integration of innovative customs procedure, improved detection of elasmobranch IWT, advice on trade monitoring, and draft improvements to current policies.		Continue to work closely with MMAF to align the project outputs with the Ministerial Degree.
Output 1. A comprehensive understanding of the political and operational landscape of elasmobranch trade has been documented, including the identification of all key stakeholders, their resources and unification of commitments to reducing illegal trade.	1.1 By end of year one, all key trade stakeholders (MMAF officers, BPSPL staff, NGO's, academic researchers), have been identified, contacted, and invited to attend primary stakeholder workshop on elasmobranch trade management and species identification methods, ensuring non-gender discrimination.	In November 2018, 47 key trade stakeho workshop in Jakarta (Supplementary Info	ermation 4, 5, 6).
	1.2 Following a two-day inception/consultation event with key partners in Jakarta with at least 25 participants, the commitments (resources, geographic coverage, skills, responsibilities) of the core stakeholder groups (identified in 1.1) have been mapped, and the gaps and streamlining opportunities have been identified by year one.	Information on resources, geographical collated from workshop minutes and feed workshop in November and presented in (Supplementary Information 8).	back forms during the project inception
	1.3 By end of Y1 three one-day regional focus groups (Jakarta, Semarang and Surabaya) will collate information on operational processes, local knowledge and understanding of CITES commitments from fishers, processors and traders which relate to their fishery/trade routes.	During year 1, project partners visited BF twice (November 18 and January 19) and Pontianak, Padang and Sorong (Feb/Mar facilities to collect information on operation understanding of CITES using a guiding information 7). Results were collated and (Supplementary Information 8).	d BPSPL Makassar (January 19), rch 19) and one of their exporters onal processes and localised questionnaire (Supplementary
	1.4 By end of year one, a consultation report, which consolidates information from the core stakeholder event and regional focus groups, outlines a	Information and knowledge collected duri consultation document which is currently information 8).	

	unified and sustainable approach to a national-level elasmobranch trade and monitoring program.	
Activity 1.1 Desk-based study on collation of current knowledge, political and legal frameworks and data on Indonesian elasmobranch trade		A 40-page reference document including an overview of geography, products traded, current management and conservation actions and obligations, and available methods for identifying shark species was produced (Supplementary Information 2).
Activity 1.2 Ph. D student to compile glo current trade regulations adopted by othe events and ultimately the production of a current elasmobranch trade	er nations, which will support stakeholder	The PhD student, Andhika Prasetyo is drafting the first chapter of his PhD; global overview of elasmobranch trade as detailed in his learning agreement (Supplementary Information 3).
Activity 1.3 Key stakeholders identified a project and attendance at the opening sta		Fifty shark and ray trade management stakeholders from across government departments, academia and research and NGOs, were invited to attend the project inception workshop in November 2018 (Supplementary Information 4, 5).
Activity 1.4 Design of core stakeholder workshop and regional focus groups		The two-day stakeholder workshop and regional focus groups were collaboratively designed by all project partners (Supplementary information 4, Project inception agenda and letter of invitation and Supplementary Information 7, focus group questionnaire).
Activity 1.5 Letter of invitation and agend group attendees.	das circulated to workshop and focus	Workshop agendas were sent to stakeholders identified in activity 1.3.
Activity 1.6 Two-day workshop hosted b (NGOs, researchers, Governmental repre		The project inception workshop took place on the 14 th and 15 th November 2018 in Jakarta, hosted by MMAF and Cefas. Forty-seven stakeholders attended (Supplementary Information 5, workshop attendance record, Supplementary Information 6, workshop minutes).
Activity 1.7 Regional focus groups for fishers, processors and traders held at Jakarta, Semarang and Surabaya.		Cefas and MMAF undertook an additional visit to inspection hubs BPSPL Serang, 13 th November 2018 and BPSPL Denpasar, 16 th November 2018 (Figure 6). The three planned regional focus groups were conducted by Cefas, MMAF and WCS at BPSPL Serang (28th January 2019), BPSPL Denpasar (29th January 2019) and BPSPL Makassar (31st January 2019) with visits to exporter facilities at each. MMAF and WCS visited the three remaining trade hubs; BPSPL Pontianak, 26th February 2019; BPSPL Sorong, 4th March 2019; BPSPL Medan (Pedang),12th March 2019) (Supplementary Information 9, 10, attendance lists).
Activity 1.8 Production of consultation document from the workshop minutes (1.6, 1.7) from core stakeholder event and focus groups		A 24-page consultation document was produced using meeting minutes and group exercises from the Project Inception Workshop and from the questionnaires and minutes from regional focus groups (Supplementary Information 8).
Activity 1.9 Consultation document sent review and comment.	to all key workshop participants to	Consultation document will be sent to all workshop and focus group participants for comment and review as planned at the end of April 2019.
Activity 1.10 Finalisation and sign-off of report and submission to MMAF and other relevant Governmental bodies.		Finalisation and sign-off of the consultation document is planned for May 2019.

Output 2. Improved capacity of MMAF to deliver advanced, on-going training to effectively identify and monitor the trade of CITES-protected elasmobranch species, thereby increasing the detection rates of attempted illegal trades.

- 2.1. By the end of Q2 Y2, a training programme for a step-wise approach to species-specific identification of elasmobranch products has been designed utilising the existing resources identified during the consultation workshop (i.e. expertise, documentation, guides), which can be used to build capacity for detection and reporting of illegal shark and ray trade (i.e. shipment documentation, CITES reporting).
- 2.2 By end of Y2, >25 individuals (of equal gender where possible) from MMAF offices in Java and Bali) have been effectively trained during a two-day workshop in the step-wise approach. By the end of the project, these staff will have the capacity to independently train other officers across the country as directed by an appointed training lead in MMAF.A further 15 law enforcement officers and legal specialists will have also been simultaneous trained in the new procedures.
- 2.3 By end of Y3, the step-wise approach to species detection has been implemented at BPSPL Denpasar (Bali) and Serang (Java), with at least a 5% visual assessment of a random subsample (e.g. 1 in 20 sacks/boxes), and a sample of 200 individual products selected for independent genetic verification. These methods result in at least a 30% increase in the detection of IWT compared to Y1 baselines.
- **2.4** By end of Y3, the remaining four BPSPL offices have received training in the step-wise approach, with improved

Existing resources including expertise, documentation, guides) have been collated (Methods for identifying shark and ray species, Supplementary Information 2, Consultation document, Supplementary Information 8) and the Elasmobranch Trade Training Team is currently being formed and officialised.

	" (HODDOD: 6" ;	7	
	capacity of all 6 BPSPL offices to detect CITES-listed in trade.		
Activity 2.1 Gather existing learning resources from key partners on elasmobranch identification methods		Resources gathered as part of desk-based study (activity 1.1) and during regional focus groups with BPSPL offices who have developed some of their own material (Supplementary Information 2, Figure 7).	
Activity 2.2 Design training programme and improved customs procedure, and structure of the training event		Advanced fin ID training placeholder for late summer 2019 (after COP18) and a molecular sampling campaign organised by the PhD student is planned for November and December 2019 to coincide with high volumes of trade in the run up to Chinese New Year.	
Activity 2.3 MMAF to identify an Elasmobranch Trade Training Team that will manage future training programs and compliance of CITES detection at BPSPL offices.		Meetings between MMAF and WCS (4th March 2019, 8 th April 2019) with the MMAF training centre and utilisation department to; discuss the participants of the training group, identify next steps to ensure the training is in line with current government training structure, and to review current training modules (Supplementary Information 11).	
Activity 2.4 Invitation to MMAF, two maj customs officials and genetic laboratory to IWT detection	or BPSPL offices from Bali and Java, facility for training in step-wise approach	To be completed during year 2.	
Activity 2.5 Two-day training event in visubsequent genetic material collection.	sual detection methods and then	See Activity 2.2.	
Activity 2.6 Assessments on the accura identify CITES protect species following		Assessments will be undertaken prior to training but as part of the workshop event to enable the international experts to run the assessments impartially.	
Activity 2.7 Improved customs procedur trade regulators (BPSPL officers/WCS V		To be completed during year 2.	
Activity 2.8 Monthly submission of seizure records collated and analysed by MMAF, WCS and Cefas staff to inform the effectiveness of the training against baseline confiscations		Collection of seizure records to begin during year 2.	
Activity 2.9 Academic paper drafted by Ph. D student on the duel identification of elasmobranch products.		Academic paper on dual identification to be undertaken after the molecular sampling campaign planned for Nov/Dec 2019.	
Activity 2.10 MMAF deliver advanced training programme to remaining four BPSPL offices.		To be completed during year 2.	
Activity 2.11 Cefas follow up visit to assess implementation of improved customs procedure and gather feedback on efficiency.		To be completed during year 2.	
Output 3. Improved capacity for law enforcement agencies to effectively respond to incidences of illegal trade using evidence-based approaches 3.1: By end of Y3, at least two customs representatives from at least four major exit ports for shark and ray products (8 individuals in total) have been trained in		Targeted participants for the training have been identified who will representing customs at five major airports and seaports in Indonesia (Ngurah Rai Airport Denpasar; Soekarno Hatta Aiport, Jakarta; Tanjung Priok Seaport, Jakarta; Tanjung Perak Seaport, Surabaya, and Hang Nadim Airport, Batam)	

creates stronger disincentives for illegal trade of elasmobranch products.	shark and ray species identification protocols, in collaboration with MMAF. 3.2: By the end of Y3, at least 30 cases of illegal trade in CITES-listed shark and ray species have been investigated, with at least 10 of those effectively being brought to judicial trial (baseline: 7 cases 2015, 6 cases in 2016, 2 (large) cases in 2015). 3.3 By the end of Y3, at least 50 media articles have been published in the national and international media highlighting the Indonesian government's response to illegal trade in marine products.	A marine police officer received information on a smuggling attempt of manta ray gills in East Solor. The WCU and DKP East Flores supported the East Flores marine police (Polair) to stop the smuggling attempt from Menanga village, East Solor, to Maumere, East Nusa Tenggara. Three boxes full of manta ray gills were found in KM Trisakti boat when it docked in Larantuka seaport. However, the police did not find the suspects who used the boat because they escaped in advance of the operation. Three national media articles were released related to the illegal trade of shark and ray in Indonesia. One of the media articles was published by Mongabay Indonesia regarding the smuggling of manta ray gills in Indonesia, titled "Digagalkan Penyelundupan Insang Pari Manta di Flores Timur" ("Foiled by Manta Pari Gills Smuggling in East Flores"). The link of the news is: http://www.mongabay.co.id/2018/10/03/digagalkan-penyelundupan-insang-pari-manta-di-flores-timur/
Activity 3.1 WCS to conduct training of customs officers in species identification protocols for at least four major exit ports		A coordination meeting between WCS and the Customs agency was conducted at the Customs office in Jakarta (January 31st 2019) to plan trainings for Customs officers. Five targeted training locations were identified: Custom of Ngurah Rai Airport, Denpasar; Soekarno Hatta International Airport, Jakarta; Tanjung Priok Seaport, Jakarta; Tanjung Perak Sea Port, Surabaya; and Hang Nadim Airport, Batam. The training will be conducted in the Y2.
Activity 3.2 Provide law enforcement agencies with evidence and support to conduct investigations and arrests of illegal traders of elasmobranch products.		During year 1, the WCU has supported the law enforcement agencies to tackle a smuggling attempt of manta ray gills in East Nusa Tenggara. The team supported with evidence and with investigations and arrests. The number of investigations and arrests will be reported in the next reporting period.
Activity 3.3 Publicise Indonesia's response to marine wildlife crime by publishing cases in national and international media.		Three articles have been produced focusing on enforcement of regulations regarding trade in shark species, the majority in the Indonesian press. This will be continued in years 2 and 3.
Activity 3.4 Collect, collate and analyse intelligence and law enforcement data, and use for monitoring and informing enforcement action		A community-based informant network has been established in Java and Bali since 2010 to tackle IWT, especially for protected birds and mammals. Since January 2019, WCS' WCU have begun expanding the network to collect information marine species such as sharks and rays. In this reporting period, WCS through Marine WCU are in the process of establishing the informant network in West Nusa Tenggara.
Output 4. MMAF have increased capacity to utilise their improved scientific evidence from the implementation of the step-wise detection methods to better inform	4.1 At end of Y3, closing ceremonies including a core stakeholder one-day conference and a three one-day regional outreach events at (Jakarta, Semarang, Surabaya) that engage with	

national policies on elasmobranch trade management and CITES compliance.	beneficiaries of the elasmobranch fishery/trade have been led by MMAF to communicate the results and associated benefits of this project to local communities.	
	4.2 At the end of Y3, three key members from MMAF have visited Cefas and DEFRA in the UK to shadow scientific advisors and policy makers on the interpretation of scientific evidence into policy and knowledge sharing on marine product traceability systems.	
	4.3 By the end of the project, in addition to improvements to elasmobranch trade regulation, high level recommendations on next steps towards improved fisheries management and research will be presented to MMAF in a five-year plan	
Activity 4.1 Three directorate staff visit to Defra staff on science based policy advice		To be completed during year 3.
Activity 4.2 Directorate staff produce vis	sitation report	To be completed during year 3.
Activity 4.3 Three regional workshops of Surabaya to communicate the improved illegal wildlife trade		To be completed during year 3.
Activity 4.4 One-day conference with coutcomes and knowledge sharing.	ore stakeholders from 1.6 to share project	To be completed during year 3.
Activity 4.5 Feedback following the engagement workshops is consolidated and fed back to MMAF on potential improvements in a report		To be completed during year 3.
Activity 4.6 Five-year plan produced that lessons learned and future directions for management	at summarise the results from the project, improvements to elasmobranch trade	To be completed during year 3.
Activity 4.7 Sign revised implementation	n agreements between MMAF and Cefas.	To be completed during year 3.

Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

Project summary	Measurable Indicators	Means of verification	Important Assumptions			
	mpact: Strengthened monitoring and enforcement of elasmobranch trade decreases illegal wildlife trade, reduces exploitation of threatened species, and promotes ustainable management of fisheries, safeguarding biodiversity and livelihoods through improved legal frameworks.					
	afeguarding biodiversity and livelihoods throi	ugh improved legal frameworks.				
Outcome:						
Indonesia has capacity to effectively trace, monitor and control trade in sharks and rays to support CITES legislation and provide a risk-based approach to legal and sustainable resource use.	0.1 By end of year one, a key partner workshop has been delivered in Jakarta, engaging with >25 key elasmobranch trade stakeholders, including governmental bodies, academic experts, regulatory bodies and representatives from regional NGO's, identifying the interventions necessary to improve elasmobranch trade monitoring processes. Three local focus groups will be run in Jakarta, Semarang and Surabaya to collate input from fishers, processors and traders.	0.1 Attendee lists from stakeholder events; surveys and photos from stakeholder workshop; national and social traditional and social media records; organogram	0.1 Indonesian governmental regulatory agencies (MMAF/BPSBLs) and regional trade stakeholders (fishers, processors and traders) actively engage in workshops and are willing to share views and opinions. MMAF have actively pursued support from Cefas in improving elasmobranch trade. WCS have a demonstrated success in delivering stakeholder workshops.			
	0.2 By the end of the project at least 15 individuals from MMAF have been successfully trained in elasmobranch identification techniques, with a significant increase in accurate identification of products of all trained staff in comparison to Y1 baselines.	0.2 Training records for all BPSPL officers and MMAF training staff; staff surveys on training capabilities/confidence in detecting species-specific elasmobranch products before and after training; independent validation of trade assessments (visual vs genetic identification).	0.2 - 0.4 Management authority staff engage in centralised training, standardisation of shark and ray product identification and improved customs procedures. Improvement of elasmobranch detection methods will be tailored to MMAF requirements and are easily integrated into current operations at minimal cost.			
	0.3 By the end of the project, increased capacity and efficiency of MMAF and law enforcement officers increases prosecution rate of illegal shark and ray traders (and reports to CITES committees), as determined against	0.3 Seizure record trends from Customs Agency available from project duration; intelligence database built on illegal wildlife traders; documented evidence of successful prosecutions including police records and court documents; copies of CITES committee reports.	0.2 – 0.4 Staff changes does not prevent continuation of improved process to detect elasmobranch IWT. Training a team of 10 core Elasmobranch Trade Training Team will ensure improved procedures can be dynamic around changing workforces			

	baseline data (7 cases 2015, 6 cases in 2016, 2 (large) cases in 2015). 0.4 By 2020, a five-year plan is delivered to MMAF outlining recommendations for integration of innovative customs procedure, improved detection of elasmobranch IWT, advice on trade monitoring, and draft improvements to current policies.	0.4 Recommendation reported presented to MMAF, draft policies, renewed implementation agreement signed between MMAF and Cefas.	and evolving trade dynamics. All training materials will be held and manged by MMAF. 0.2 - 0.3 The results of the improved customs procedures do not improve the detection capabilities of trade regulators. MMAF have expressed much needed training requirements and by using the world's leading experts on elasmobranch ID and fisheries management that have a proven track record in regulatory improvements, the likelihood of successful outcomes are maximised.
Output 1			
A comprehensive understanding of the political and operational landscape of elasmobranch trade has been documented, including the identification of all key stakeholders, their resources and unification of commitments to reducing illegal trade.	1.1 By end of year one, all key trade stakeholders (MMAF officers, BPSPL staff, NGO's, academic researchers), have been identified, contacted, and invited to attend primary stakeholder workshop on elasmobranch trade management and species identification methods, ensuring non-gender discrimination.	1.1 Organogram of governance structure and trade routes; scoping report; stakeholder meeting invitation list.	1.1 All active scientists, NGOs, and charities working on elasmobranch conservation are willing to collaborate on this project. Many key stakeholders (WWF, PEW, IUCN Shark Specialist Group, scientist) have already been contacted and have shown enthusiasm and interest in contributing to this work.
	1.2 Following a two-day inception/consultation event with key partners in Jakarta with at least 25 participants, the commitments (resources, geographic coverage, skills, responsibilities) of the core stakeholder groups (identified in 1.1) have been mapped, and the gaps and streamlining opportunities have been identified by year one. 1.3 By end of Y1 three one-day regional focus groups (Jakarta, Semarang and Surabaya) will collate information on	1.2 Photographs from workshop; attendee lists; workshop minutes; media engagement. 1.3 Feedback forms from attendees; photographs from the event; focus	1.2 – 1.4 Stakeholders involved with workshops and focus groups will be prepared to share local knowledge, resources, and opinions on the current elasmobranch trade chain. WCS have a proven track record in successful engagement with fishers and traders, which was demonstrated through their previous Darwin funded project. Ensuring participation of communities directly involved with the trade chain will maximise the likelihood of buy in to the project.
	operational processes, local knowledge and understanding of CITES	group minutes; media engagement	1.2 – 1.3 The work from this project generates sufficient media interest

	commitments from fishers, processors and traders which relate to their fishery/trade routes. 1.4 By end of year one, a consultation report, which consolidates information from the core stakeholder event and regional focus groups, outlines a unified and sustainable approach to a national-level elasmobranch trade and monitoring program.	1.4 Consultation responses; consultation report; participant feedback surveys	locally, nationally and internationally so that the progress of this work can be communicated throughout. Cefas have a dedicated communications team that has demonstrated success in media engagement. Likewise, WCS have recently had strong media engagement from their Darwin funded projects and wider initiatives in country.
Output 2	2.4 By the end of O2 V2 a training	2.1 Training programme agends:	2.1 Consultation with identification and
Improved capacity of MMAF to deliver advanced, on-going training to effectively identify and monitor the trade of CITES-protected elasmobranch species, thereby increasing the detection rates of attempted illegal trades.	2.1. By the end of Q2 Y2, a training programme for a step-wise approach to species-specific identification of elasmobranch products has been designed utilising the existing resources identified during the consultation workshop (i.e. expertise, documentation, guides), which can be used to build capacity for detection and reporting of illegal shark and ray trade (i.e. shipment documentation, CITES reporting).	2.1 Training programme agenda; supporting resources;	2.1 Consultation with identification and genetic experts has allowed the sharing of resources needed to develop an effective step-wise detection protocol for improved CITES compliance. Having already connected with several experts (WWF, WCS, PEW, IUCN Shark Specialist Group) in country regarding this project, all have expressed strong interest in participation and support.
	2.2 By end of Y2, >25 individuals (of equal gender where possible) from MMAF offices in Java and Bali) have been effectively trained during a two-day workshop in the step-wise approach. By the end of the project, these staff will have the capacity to independently train other officers across the country as directed by an appointed training lead in MMAF.A further 15 law enforcement officers and legal specialists will have also been simultaneous trained in the new procedures.	2.2 Training workshop attendee list; training certification; results of pre-and post-training assessments and confidence survey; press releases and social media engagement from the event. 2.3 Monthly seizure records submitted	2.2 & 2.3 The implementation of the improved customs procedure will increase the capacity for BPSPL officers to investigate suspected IWT and increase the accuracy/confidence in detecting CITIES listed species. Current means of species-level detection is poor and staff confidence is low. It is therefore highly likely that increased training in visual methods will improve staff abilities to detect illegal products. Furthermore, the availability to innovative genetic procedures will increase the chances of detected illegal species. Evaluating the new procedure half way through implementation allows
		from BPSPL office to MMAF and Cefas;	adaptions to be made to improve

	2.3 By end of Y3, the step-wise approach to species detection has been implemented at BPSPL Denpasar (Bali) and Serang (Java), with at least a 5% visual assessment of a random subsample (e.g. 1 in 20 sacks/boxes), and a sample of 200 individual products selected for independent genetic verification. These methods result in at least a 30% increase in the detection of IWT compared to Y1 baselines. 2.4 By end of Y3, the remaining four BPSPL offices have received training in the step-wise approach, with improved capacity of all 6 BPSPL offices to detect CITES-listed in trade.	results from genetic verification submitted by {insert name of genetics facility]; academic paper drafted on results of duel identification techniques by Ph. D student 2.4 Training reports and certificates from remaining BPSPL offices; pre- and post-training survey assessments; feedback from the MMAF training lead.	implementation and efficiency of processes. 2.2 - 2.4 BPSPL will have the capacity and enthusiasm to collect and submit regular qualitative and quantitative data on traded elasmobranch products. Longstanding working relationships between MMAF and WCS (Darwin Initiative grant 22-008) demonstrate the ability for both parties' commitment and capabilities to collect high quality data. Furthermore, Cefas's demonstrated ability to work with national/international fisheries data will ensure there are sufficient processes at BPSPL and MMAF to collect and report pilot study data 2.3 & 2.4 The BPSPL offices and genetics facilities will remain committed to delivering the customs procedure within allocated timeframes and provide sufficient feedback to ensure improvements can be made for the final procedure. Working agreements
Output 3 Improved capacity for law enforcement agencies to effectively respond to incidences of illegal trade using evidence-based approaches creates stronger disincentives for illegal trade of elasmobranch products.	3.1: By end of Y3, at least two customs representatives from at least four major exist ports for shark and ray products (8 individuals in total) have been trained in shark and ray species identification protocols, in collaboration with MMAF. 3.2: By the end of Y3, at least 30 cases of illegal trade in CITES-listed shark and ray species have been investigated, with at least 10 of those effectively being brought to judicial trial (baseline: 7 cases 2015, 6 cases in 2016, 2 (large) cases in 2015).	3.1: Training records from all customs representatives; test scores from independently verified assessments 3.2: Law enforcement records from cases; i2 intelligence database	3.1 Government and law enforcement agencies support the implementation of the proposed custom procedure and agree with the benefits that this will offer in the long-term. WCS's Wildlife Crime's Unit has a successful track record of collaboration with customs agencies and other law enforcement institutions to combat illegal wildlife trade. Customs directors have stated their support for this project during proposal development discussions. Cefas's longstanding experience in project management and protocol design within fisheries management will ensure high quality deliverance of product and continued sup.

	3.3 By the end of Y3, at least 50 media	3.3 Media articles; social media impact	3.2 & 3.3 Improved capacity of Customs
	articles have been published in the	metrics including engagement and	Agency to detect IWT leads an
	national and international media	retweets	increased detection rate of IWT and a
	highlighting the Indonesian		decrease in the level of IWT attempts
	government's response to illegal trade		from traders who are now more aware
	in marine products.		and compliant to current regulations.
	·		The Indonesian government has
			already shown a strong commitment to
			combatting illegal shark and ray trade,
			with 29 legal cases against illegal
			elasmobranch traders since April 2014,
			leading to 19 successful prosecutions
			with over US\$70,000 levied in fines and
			122 months of jail time. WCS's
			monitoring data indicates that high
			profile arrests in enforcement hotspots
			had a strong deterrent effect and led to
			a decline in illegal trading. Therefore,
			we anticipate that expanding and
			intensifying the WCU approach to
			strategic locations will continue to
			deliver these results. Further, WCS and
			MMAF have existing relationships with
			major industry players who are willing
			and eager to receive support to ensure
Output 4			their businesses are compliant
•			
MMAF have increased capacity to	4.1 At end of Y3, closing ceremonies	4.1 Photographs and media	
utilise their improved scientific evidence	including a core stakeholder one-day	engagement from the event; attendance	4.1 & 4.3 Field officers collect
from the implementation of the step-	conference and a three one-day	lists; event feedback surveys on	necessary data needed to quantify
wise detection methods to better inform	regional outreach events at (Jakarta,	understanding of topic and value of the	results and produce recommended
national policies on elasmobranch trade	Semarang, Surabaya) that engage with	communication.	documentation. Effective project
management and CITES compliance.	beneficiaries of the elasmobranch		management and delivery by project
	fishery/trade have been led by MMAF to		team will ensure collation and
	communicate the results and		appropriate documentation of this
	associated benefits of this project to		process. Interim evaluations and
	local communities.		monitoring of the data and
	4.0.44	40)5:4:5:	implementation are conducted monthly.
	4.2 At the end of Y3, three key	4.2 Visitation reports from the three	4.0.The manifeld and accommon definitions
	members from MMAF have visited	MMAF employees providing feedback	4.2 The provided recommendations are
	Cefas and DEFRA in the UK to shadow	on training; photographs and media	applicable to current Indonesian
	scientific advisors and policy makers on	engagement;	regulations and policy and MMAF are in
	the interpretation of scientific evidence		the position to propose amendments to

into policy and knowledge sharing on marine product traceability systems.

4.3 By the end of the project, in addition to improvements to elasmobranch trade regulation, high level recommendations on next steps towards improved fisheries management and research will be presented to MMAF in a five-year plan

4.3 Final five-year report delivered to MMAF during closing seminar; renewed implementation agreement between MMAF and Cefas.

the government. MMAF have already committed to enforcing new trade restrictions on up listed CITES prohibited species. These new processes will be designed to support these efforts and there will be strong incentives to adopt the improvements.

4.3 MMAF are in the position to dedicate time and resources to the continued managing of the IWT detection program. This team can continually monitor the trade, engage with stakeholders to ensure awareness of processes, and are able to provide educational training in schools and/or local communities. MMAF have already demonstrated an ability to engage with local communities through their collaboration with WCS. This project, with the addition of longterm commitments from Cefas and the British Government, will ensure these activities are supported into the future.

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

- 1.1 Desk-based study on collation of current knowledge, political and legal frameworks and data on Indonesian elasmobranch trade
- 1.2 Ph. D student to compile global overview on elasmobranch trade and current trade regulations adopted by other nations, which will support stakeholder events and ultimately the production of an academic paper on an overview on current elasmobranch trade
- 1.3 Key stakeholders identified and contacted regarding involvement of project and attendance at the opening stakeholder workshop
- 1.4 Design of core stakeholder workshop and regional focus groups
- 1.5 Letter of invitation and agendas circulated to workshop and focus group attendees.
- 1.6 Two-day workshop hosted by MMAF in Jakarta for core stakeholders (NGOs, researchers, Governmental representatives)
- 1.7 Regional focus groups for fishers, processors and traders held at Jakarta, Semarang and Surabaya.
- 1.8 Production of consultation document from the workshop minutes (1.6, 1.7) from core stakeholder event and focus groups
- 1.9 Consultation document sent to all key workshop participants to review and comment.
- 1.10 Finalisation and sign-off of report and submission to MMAF and other relevant Governmental bodies.
- 2.1 Gather existing learning resources from key partners on elasmobranch identification methods
- 2.2 Design training programme and improved customs procedure, and structure of the training event

- 2.3 MMAF to identify an Elasmobranch Trade Training Team that will manage future training programs and compliance of CITES detection at BPSPL offices.
- 2.4 Invitation to MMAF, two major BPSPL offices from Bali and Java, customs officials and genetic laboratory facility for training in step-wise approach to IWT detection
- 2.5 Two-day training event in visual detection methods and then subsequent genetic material collection.
- 2.6 Assessments on the accuracy of BBPSL officers to effectively identify CITES protect species following training.
- 2.7 Improved customs procedures refined and agreed with MMAF and trade regulators (BPSPL officers/WCS WCU) following feedback from 2.6.
- 2.7 Monthly submission of seizure records collated and analysed by MMAF, WCS and Cefas staff to inform the effectiveness of the training against baseline confiscations
- 2.8 Academic paper drafted by Ph. D student on the duel identification of elasmobranch products.
- 2.9 MMAF deliver advanced training programme to reaming four BPSPL offices.
- 2.10 Cefas follow up visit to assess implementation of improved customs procedure and gather feedback on efficiency.
- 3.1 WCS to conduct training of customs officers in species identification protocols for at least four major exit ports
- 3.2 Provide law enforcement agencies with evidence and support to conduct investigations and arrests of illegal traders of elasmobranch products.
- 3.3 Publicise Indonesia's response to marine wildlife crime by publishing cases in national and international media.
- 3.4 Collect, collate and analyse intelligence and law enforcement data, and use for monitoring and informing enforcement action
- 4.1 Three directorate staff visit the UK for a week to shadow Cefas and DEFRA staff on science based policy advice
- 4.2 Directorate staff produce visitation report
- 4.3 Three regional workshops delivered in Jakarta, Semarang and Surabaya to communicate the improved trade procedures of MMAF to detect illegal wildlife trade
- 4.4 One-day conference with core stakeholders from 1.6 to share project outcomes and knowledge sharing.
- 4.5 Feedback following the engagement workshops is consolidated and fed back to MMAF on potential improvements in a report
- 4.6 Five-year plan produced that summarise the results from the project, lessons learned and future directions for improvements to elasmobranch trade management
- 4.7 Sign revised implementation agreements between MMAF and Cefas.

Annex 3 Standard Measures

Annex 4 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to IWT-Fund@ltsi.co.uk putting the project number in the subject line.	Yes
Is your report more than 10MB? If so, please discuss with lwt-Fund@ltsi.co.uk about the best way to deliver the report, putting the project number in the subject line.	
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	