Applicant: **Currie, Abi**
Organisation: **Centre for Environment Fisheries & Aquaculture Science**
Funding Sought: **£1,486,440.00**

IWTEXR10S2\1002

Strengthening Indonesia’s capacity to reduce illegal shark fisheries and trade

Indonesia catches more sharks and rays than any other country. As a major exporter of shark products (e.g., fins), and with a strong domestic market supporting local food security, ensuring CITES compliance is enormously challenging. This project scales-up a successful institutional capacity building project to increase detection of illegally traded sharks and rays. We will engage stakeholders to increase compliance, enhance data collection to support sustainable local and export fisheries and trade, and develop Indonesia’s next generation of shark experts.

IWTEXR10S2\1002

Strengthening Indonesia’s capacity to reduce illegal shark fisheries and trade

Section 1 - Contact Details

CONTACT DETAILS

Title	Miss
Name	Abi
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Organisation	[redacted]
Tel (Work)	[redacted]
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GMS ORGANISATION

Type	**Organisation**
Name	Centre for Environment Fisheries & Aquaculture Science
Phone (Work)	[redacted]
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Section 2 - Title, Themes and Summary

Q3. Title:

Strengthening Indonesia’s capacity to reduce illegal shark fisheries and trade

What was your Stage 1 reference number? e.g. IWTEXR10S1\1001

IWTEXR10S1\1001

Please provide a cover letter as a **PDF** document, responding to feedback received at Stage 1 if applicable.

IWTEXR10S21002 C8624 Cefas Cover Letter
30/10/2023
14:45:39
pdf 263.07 KB

Q4. Which of the four key IWT Challenge Fund themes will your project address?

Please tick all that apply. Note that projects supporting more than one will not achieve a higher score, and ticking themes that your project does not address may negatively affect project scores.

- ☑ Ensuring effective legal frameworks and deterrents
- ☑ Strengthening law enforcement
- ☑ Developing sustainable livelihoods to benefit people directly affected by IWT

Q5. Key Ecosystems, Approaches and Threats

Select up to 3 conservation actions that characterise your approach, and up to 3 threats to biodiversity you intend to address, from dropdown lists.

Conservation Action 1

Species management (harvest, recovery, re-introduction, ex-situ)

Conservation Action 2

Law & policy (legislation, regulations, standards, codes, enforcement)

Conservation Action 3

Livelihood, economic & other incentives (incl. conservation payments)

Threats 1

Biological resource use (hunting, gathering, logging, fishing)

Threats 2

Other threats

Threats 3

No Response

Q6. Species project is focusing on

Please include both the common name and scientific name.

Requiem sharks (Carcharhinus spp.)	Hammerhead sharks (Sphyrna spp.)

Thresher sharks (Alopias spp.)	Mako sharks (Isurus spp.)

Do you require more fields?

⦿ Yes

Wedgefish (Rhynchobatus spp.)	Guitarfish (Glaucostegus spp.)
Sawfish (Pristidae spp.)	Rays (Manta spp., Mobula spp.)

Q7. Summary of project

Please provide a brief non-technical summary of your project: the problem/need it is trying to address, its aims, and the key activities you plan on undertaking.

Indonesia catches more sharks and rays than any other country. As a major exporter of shark products (e.g., fins), and with a strong domestic market supporting local food security, ensuring CITES compliance is enormously challenging. This project scales-up a successful institutional capacity building project to increase detection of illegally traded sharks and rays. We will engage stakeholders to increase compliance, enhance data collection to support sustainable local and export fisheries and trade, and develop Indonesia's next generation of shark experts.

Section 3 - Countries, Dates & Budget Summary

Q8. Country(ies)

Which eligible host country(ies) will your project be working in?

Country 1	Indonesia	**Country 2**	*No Response*
Country 3	*No Response*	**Country 4**	*No Response*

Do you require more fields?

⦿ No

Q9. Project dates

Start date:	End date:	Duration (e.g. 2 years, 3 months):
01 May 2024	31 March 2028	3 years, 10 months

Q10. Budget summary

Year:	2024/25	2025/26	2026/27	2027/28	Total request

Amount:	£407,736.00	£413,613.00	£408,817.00	£256,274.00	**£** 1,486,440.00

Q11. Do you have matched funding arrangements?

⊙ Yes

Please ensure you clearly outline your matched funding arrangement in the budget.

Q12. If you have a significant amount of unconfirmed matched funding, please clarify how you will deliver the project if you don't manage to secure this?

Cefas – ca £[redacted] over project lifetime
MMAF – ca £[redacted]/year in staff time, and facilities for workshops, coordination of field costs at six regional offices, coordination of meetings at MMAF offices, and communications.
REKAM - Oceans 5 Philanthropy ~ US $[redacted]/year (December 2022 – November 2025) in staff time, field activities, meetings, workshop, training.
BRIN (NRIA) - ca £[redacted]/year in staff time and research facilities.
LJMU - £[redacted] international tuition fee waiver with additional contributions of in-kind provisioning of laboratory facilities and academic staff time.
The University of Edinburgh – ca £[redacted]/year in-kind academic staff time

Q13. Have you received, applied for or plan to apply for any other UK Government funding for the proposed project or similar?

⊙ No

Section 4 - Problem statement & Gap in existing approaches

Q14. Problem the project is trying to address

Please describe the problem your project is trying to address in terms of illegal wildlife trade and its relationship with poverty. What is the need, challenge or opportunity? Please describe the level of threat to the species concerned. You should also explain which communities are affected by this issue, and how this aspect of the illegal trade in wildlife relates to poverty or efforts of people and/or states to reduce poverty.

Worldwide, an estimated one-third of sharks and rays (hereafter referenced collectively as 'sharks') are threatened with extinction due to the combination of global fishing pressure, the low reproductive rates of many species and high market price for shark fins (1, 2). A hotspot for diversity, Indonesia catches more sharks than any other country in the world, and with potentially high levels of local consumption (3) as well as being a major exporter of shark products, it a global fisheries management and conservation priority (3).

International treaties are increasingly regulating fisheries and seafood trade to reduce threats to marine species. At CITES CoP19, the number of sharks listed in Appendix II more than tripled as a mechanism to prompt improved management (4), but these regulations apply only to exports and have no direct control on the capture (and legality of capture) and consumption of CITES-listed sharks in domestic markets. In fact, in some instances, failure to manage the legal trade of CITES-listed species results in increased illegal trade where community dependence on those species is high and alternative options limited (5).

Indonesia's fisheries are diverse, from large industrial vessels using modern technologies to small-scale vessels relying on simple fishing gears. All fisheries catch sharks, most (86%) as bycatch when targeting other species, for example the tuna longline fleet, but some fisheries target sharks (6). Shark bycatches often provide a cheap source of animal protein, while derived products such as the fins can be an economically important high value part of the catch.

Catching and consuming sharks is not illegal in Indonesia, but the international export of CITES-listed species needs to be controlled through comprehensive monitoring and legal frameworks to prevent trading within illegal supply chains. However, there are substantial discrepancies between recorded catches of sharks and declared exports, due to a combination of unknown levels of under-reporting, illegal trade and domestic consumption (3).

Progress in determining the extent of, and then reducing illegal trade in shark products in Indonesia is challenging because the level of domestic consumption is unquantified. If community-level consumption accounts for a greater proportion of the mismatch, then the problem is one of food security, but if illegal trade is the greater component, then the IWT problem is much larger than we think. With a clearer definition of what constitutes legal or illegal trade in commercially important CITES-listed sharks, and with a better understanding of community dependence on their products, the scale of the IWT challenge within an otherwise legal trade can be inferred.

The illegal trade of CITES-listed sharks poses a direct economic risk, for example from sanctions suspending international trade agreements, as well as threatening local food security and biodiversity conservation. Recognising the need for substantive change, the Indonesian government is committed to implementing new effective measures at local, regional, and national scales to tackle illegal trade in sharks, improve the sustainability of fisheries and sure up livelihoods that depend on the consumption and legal trade.

Q15. Gap in existing approaches

What gap does your project fill in existing approaches? Extra **projects should also provide evidence of the intervention's success at a smaller scale.**

The remit and coordination of local, regional, and national government agencies in managing shark fisheries and trade will be critically reviewed, and the data journey of shark products from capture to export mapped. Clarifying the roles of government ministries and enforcement agencies and strengthening data collection will address current limitations in governance and management.

Following additional listings at CoP19, Indonesia's national shark trade training programme (developed in IWT057) will be revised - training in updated visual ID workshops and field implementation of innovative tools will be delivered to upscale shark trade monitoring ensuring enforcement of legal frameworks for CITES-listed species is a reality.

To promote compliance and realise behavioural change, we will engage with processors, sellers, traders, and exporters nationally, so they are proficient in trade regulations, monitoring systems, and the legal basis for domestic and international trade of CITES-listed species.

Community case studies will develop and demonstrate improved monitoring and compliance with national and regional regulations and evaluate the implications of international conservation (CITES) and fisheries management (RFMO) on the livelihoods of fishing communities.

The increased institutional capacity from these activities will facilitate the fulfilment of international treaty commitments (CITES and CBD) and deter the exploitation of endangered sharks.

Section 5 - Objectives & Commitments

Q16. Which national and international objectives and commitments does this project contribute towards?

Consider national plans such as NBSAPs and commitments such as London Conference Declarations and the Kasane and Hanoi Statements. Please provide the number(s) of the relevant commitments and some brief information on how your project will contribute to them. There is no need to include the text from the relevant commitment.

International

1. CITES – All outputs contribute to the implementation of CITES for sharks.

2. London Conference on the Illegal Wildlife Trade – Output 4 involves working with local people who benefit directly from sharks (13) and who can work towards ensuring legal trade is free from wildlife trafficking (17). Output 1 and 2 contributes to capacity building for management departments (14) and Output 3 contributes to ensuring cooperation with private sector, NGOs, academia, local communities (16).

3. Convention on Biological Diversity Global Biodiversity Framework – All outputs contribute to Goal A, B and D, reducing exploitation of shark populations (A), promoting sustainable use in fishing communities and private sector (B) and supporting Indonesia in meeting their international commitments (D). Specifically, Outputs 1, 2, 3 and 4 contribute to ensuring harvest and trade is legal and sustainable (Target 5; 10), Output 4 and “PhD Livelihoods” ensures benefits, in particular food security is protected for local communities (Target 9; 16; 20; 21), Output 2 and "PhD Tools" contributes to benefits from genetic resources being realised (Target 13), Output 1, “PhD Governance” and “PhD Livelihoods” contributes to ensuring biodiversity values are integrated into policies and poverty reduction strategies, Output 3 ensures businesses report on their dependencies and impacts on biodiversity to reduce their risks to sustainability (Target 15).

4. Kasane Statement (B, C, D12, D13) – Outputs 2 and 3 contribute to ensuring effective legal frameworks and deterrents (B) and strengthening law enforcement (C). Output 4 and “PhD Communities” supports information sharing mechanisms targeting local people (D12) and provides a mechanism for community groups to contribute to reducing illegal wildlife trade (D13).

5. International plan of Action Sharks (IV, IX, X) - Output 3 and 4 contribute to improving and developing frameworks for effective consultation with stakeholders (IV). Output 4 and “PhD Assessments” contributes to IX and X by facilitating improved species-specific data, monitoring, identification, and reporting.

National

1. Shark National Plan of Action (2021-2025) (I, III, IV, VII, VIII) – Output 2 supports the continued roll out of trade monitoring systems (I), Output 4 contributes to increasing community awareness (VII) and livelihoods (VIII) and Output 1, 2 and 3 contributes to strengthening research and national data (IV) and developing quotas to management CITES Appendix II listed sharks (III).

2. Indonesian Biodiversity Strategy and Action Plan (VI XII, XIX) – Output 1 and "PhD Governance" contributes to developing policy for management and sustainable use (VI), Outputs 3 and 4 contributes to knowledge building to promote sustainable use of biodiversity (XIX) and the project contributes to maintaining the population of threatened and endangered elasmobranchs (XII).

3. Indonesian Roadmap for Endangered, Threatened, and Protected Fish Species 2020–2024. All outputs support the mission to avoid extinction of endangered species through protection and conservation efforts and promotion of sustainable use to benefit marine ecosystems and people. Specifically, Output 1 and 4 contribute to Species and habitat management (Strategy 1), Output 2 and 3 contribute to Policy and law enforcement; Awareness and capacity building (Strategy 2, 5).

Section 6 - Scaling up approaches

Q17. Evidence for Scaling

IWT Challenge Fund Extra projects should utilise and build on evidence from past activities (from IWT Challenge Fund and beyond) to demonstrate why the approach will deliver. Please provide evidence on how your proposed project will do this.

By embedding previously successful capacity building and DNA-based identification tools (7, 8) (IWT057) into national legal frameworks, we will be able to track trade in CITES-listed species at capture (port monitoring), processing (warehouses) and export (exit ports), to create a monitoring network capable of detecting illegal trade. Proposed management and data-flow mapping will provide deep understanding of the social and governance structures required to facilitate greater impact from this enhanced monitoring.

We will expand the reach of our interventions by engaging more affected stakeholders, increasing the proportion operating legally, to realise transformative change on-the-ground in the way shark fisheries and trade are managed. Through regional engagement with the private sector, we seek to understand the drivers for and enhance compliance. At the community level, we will estimate dependence of fishers on shark consumption to secure sustainable livelihoods and food security.

Data-limited methods and NDFs developed could valuably inform assessments for other fisheries and CITES-listed species, addressing a major weakness in tropical fisheries management.

Advancing knowledge of the complex interplay between concepts of fisheries management and endangered species protection from IWT is not just relevant to the Indonesian context, but is applicable to other commercially important marine species, in other countries.

Section 7 - Method, Change Expected, GESI & Post Project Sustainability

Q18. Methodology

Describe the methods and approach you will use to achieve your intended Outcome and contribute towards your Impact. Provide information on:

- **How you have reflected on and incorporated <u>evidence and lessons learnt</u> from past and present activities and projects in the design of this project.**
- **The specific approach you are using, supported by <u>evidence</u> that it will be effective and <u>justifying why you expect it will be successful</u> in this context.**

- **How you will undertake the work (activities, materials and methods).**
- **What will be the <u>main activities</u> and where will these take place?**
- **How you will <u>manage the work</u> (governance, roles and responsibilities, project management tools, risks etc.).**

Our project builds on an established partnership between Cefas, MMAF and Rekam with members of the team conceiving both IWT057 and the current project. As we expand project scope, we have formed new academic partnerships to support delivery of novel technologies (e.g., DNA-based tools) and methods (e.g., data-limited assessments) for high impact.

We will scale demonstrated success (IWT057) in species identification training to a wider range of stakeholders (fishers, fishery observers and law enforcement agencies) and further develop molecular tools able to detect more endangered and CITES-listed species in trade than existing methods (7). To deliver on-the-ground behaviour change, we will build on Rekam's existing initiatives with the private sector and fishers to more accurately identify and record shark catches, understand illegal and legal routes to market, promote sustainable fishing practices, reduce shark bycatch, and support local livelihoods.

This will be achieved through four work packages aligned to outputs:

1. Increase institutional co-ordination: Identify and address current limitations to strengthen legal frameworks and limit illegal trade.

We will engage actors involved in management from capture to domestic consumption/ export through national and regional workshops. Using participatory mapping we will gather information on roles and responsibilities of authorities along the supply chain, and document the end-to-end flow of data (supported by "PhD Governance"). We will establish a cross-government Technical Advisory Group (TAG) including representatives from MMAF, BRIN, National Committee of Fisheries Stock Assessment, enforcement agencies, and experts from academia, to share knowledge and action recommendations identified during mapping. Relevant TAG members will be trained in the development of non-detriment findings (NDFs) and species stock assessments. In addition, "PhD Assessments" will work in parallel to the TAG to develop data-limited assessment methods which can be applied in an Indonesian context. Cefas will provide technical support to TAG experts ahead of RFMO scientific meetings to discuss relevant agenda items including species assessments.

2. Strengthening capacity: to monitor legal and illegal shark fisheries and trade.

Following the addition of species at CITES CoP19, we will update training modules within the national training programme developed in IWT057, incorporating changes in CITES identification material (updated guides expected Nov 2023). Refresher training will be delivered to 20 expert trainers before they deliver training to staff from technical implementing units, law enforcement agencies, fisheries observers, and market enumerators across Indonesia. "PhD Tools" will refine developed methods (IWT057) to build a portable and operational tool for identifying morphologically indistinct products (e.g., meat). A framework for its integration into current processes will be co-designed by "PhD Tools" and technical implementing staff.

3. Increase private sector engagement: Increase awareness of and compliance with legal fishing and trade regulations.

Engaging with the private sector at a regional scale through a stakeholder steering group, we seek to better understand the incentives and drivers for operating in legal verses illegal trade routes. We will conduct stakeholder surveys at project start and end to assess stakeholder awareness of legal trade requirements, and by measuring compliance against those legal frameworks for the duration of the project.

4. Local fisheries management interventions: engaging with shark fishing communities including fishers,

processors, and local sellers.

Working in case study locations to build on REKAMs existing initiatives, we seek to better understand the dependence of fishing communities on CITES-listed sharks, primarily through interviews conducted by "PhD Livelihoods". The results will provide an estimate of the level of domestic consumption that can be used to infer the scale of illegal trade. We will invite local communities to engage in live release of bycatch schemes (complementary to Darwin Initiative project (ref 30-008)), using shark handling guides and data collection frameworks already developed (see additional information). To target commercial tuna fisheries with high levels of bycatch, we will identify and co-design interventions following a perception study of tuna fishers.

We will scale our PhD scheme from IWT057 by offering four national PhD studentships supervised by a team of scientists at both Indonesian and UK institutions.

PhD Tools. (Host: Prof. Mariani, LJMU; Co-supervisors Dr Prasetyo, BRIN, Dr Murray, Cefas): Optimise, standardise, and seek adoption of the 'shark-dust' method to monitor trade in shark products. Specifically, we will i) develop a standardised sampling protocol for fisheries inspectors and ii) expand the reference database for the hundreds of species in trade. We will then iii) devise a workflow that will allow the metabarcoding of shark-dust samples using portable nanopore technology, and iv) conduct a country-wide investigation of landing, processing, and trading hubs using the developed methodologies.

PhD Livelihoods (Host: Prof Luky, IPB; Co-supervisors Dr Booth, Oxford University, Dr's Murray & Schiefer, Cefas): Understand the social and economic importance of CITES-listed sharks to communities. Specifically, we will i) design/ conduct semi-structured interviews and collect quantitative data (e.g., catches; consumption; trade) with catchers, processers, and sellers across four sites, ii) design/ conduct project impact assessment of regional-scale stakeholders to map supply chains from domestic to international markets. Results will be used to estimate domestic consumption of sharks to infer the scale of illegality in trade.

PhD Assessments (Host: Prof Luky, IPB; Co-supervisors Dr Kell, Imperial College London, Dr Phillips, Cefas): Develop data-limited stock assessment methods for CITES-listed sharks. Specifically, we will; i) assess access and quality of data from capture to consumption/export; ii) establish an approach for estimating catch and effort data for use in stock assessments; iii) develop data-limited stock assessment for priority species iv) ensure reproducibility in developed methods.

PhD Governance (Host: Prof Luky, IPB; Co-supervisors Dr Jones, Edinburgh University, Dr Catchpole, Cefas): Assessing effectiveness of frameworks for governing shark fisheries and trade in Indonesia. Specifically, using key informant interviews and institutional analysis we will; i) map top-down governance structures and bottom-up data flows, ii) identify key uncertainties/weaknesses in current regulatory framework iii) pilot cross-government knowledge exchange schemes, iv) incorporate livelihood data collection results in policy implementation.

Cefas will be responsible for overall project management (under an ISO 9001:2015 accredited quality management system), technical steer and reporting. The REKAM team are responsible for communication with stakeholders, collecting trade monitoring data and facilitating in-country activities.

Q19. Capability and Capacity

How will the project support the strengthening of capability and capacity of identified local and national partners, and stakeholders during its lifetime organisational or individual levels?

This project will support the strengthening of capability at an individual level and capacity building at an institutional level, ensuring legacy of outcomes long after the life of the project.

At an individual level, we will continue training and development of 20 expert trainers (training team established in IWT057), who are representatives from MMAF's technical implementing units from across Indonesia, tasked with monitoring compliance with legal frameworks. Continued support to update training content and materials will ensure the national training programme remains current and accounts for the recent expansion of shark listings at CITES CoP19 and IWT. In turn, the training team will upskill more than 200 staff from fishery observers to exit port authority personnel with the updated information substantially building institutional capacity.

Our proposed PhD studentships will increase the capability of four individuals (ensuring gender balance) during the project and is an expansion of the proven success of this approach in IWT057. Dr Andhika Prasetyo completed his PhD at Salford University in the UK, and after successfully defending his thesis and publishing research in three peer-reviewed publications, Andhika returned to Indonesia to a government position at the Research Centre for Conservation of Marine and Inland Water Resources. Andhika, with the support of his organisation, has a key role in the current project, designing a training workshop for DNA sampling of shark products , as well as being an academic supervisor for "PhD Tools". We hope that by expanding the number of funded PhDs, we can scale the success of this approach across multiple aspects of our project design and develop world-leading experts that can go on to train the next generation of researchers in Indonesia.

By building the capacity of local fishers, processors, and sellers, through to regional-scale private sector companies we will improve the understanding of regulatory frameworks for engaging in legal fisheries and reduce IWT. This in turn will increase stakeholder capacity to comply with the strengthened legal frameworks. "PhD Livelihoods" will develop surveys to assess if the project has increased stakeholder understanding and detect any differences between groups in the supply chain (e.g., fishers compared to international export companies) and potential gender driven differences.

During the design phase of this project, MMAF directly requested support to increase institutional capacity and co-ordination across ministries for developing stock assessments, establishing non-detriment findings, setting quotas, and strengthening legal trade frameworks in support of Indonesia's compliance with international conventions (including CITES and RFMOs) and to tackle the negative impacts of IWT. To support this request, we will form a cross-government technical advisory group to exchange knowledge and expertise, deliver expert training in stock assessment methods and development of NDFs and support "PhD Governance" to map management and data structures, identify strengths and weaknesses of the current system and establish the most effective ways to maintain institutional benefit beyond the life of the project.

Q20. Gender equality and social inclusion

All applicants must consider whether and how their project will contribute to promoting equality between persons of different gender and social characteristics. Explain your understanding of how individuals may be excluded from equal participation within the context of your project, and how you seek to address this. You should consider how your project will proactively contribute to ensuring individuals achieve equitable outcomes and how you will engage participants in a meaningful way.

Gender and social inclusion have been considered in project targets and when designing previous training and engagement activities (IWT057), so that they offer greater accessibility to women and marginalised groups. For example, across all activities 37% of attendees were women, this proportion increasing at regional events or when hybrid events were offered, as anticipated. Women comprise 40% of the national expert training team who will continue to deliver training to staff across Indonesia. We plan to qualitatively survey those engaged in IWT057 at project initiation to further understand potential barriers to inclusion of more women and those with childcare commitments in project activities.

Community dependence surveys designed/ conducted by "PhD Livelihoods" seek to engage fishing communities less connected to decision-making to understand the social and gender distribution of labour in fishing communities. This will include other practices of labour around fish in addition to the act of fishing (understood

to be male dominated and by different social economic groups) as this can offer further information on equality in local resource access. For example, if the processing and selling of the animals' product is mainly done by a particular group / woman, they will hold specific knowledge on the animal (such as value of certain animal parts on the market) and its value for their livelihoods and community. This will also allow us to understand how the current regulatory framework may differentially impact women or marginalised groups.

Establishing legal income for all genders and work activities is required both to reduce illegal trade of regulated species and progressing poverty reduction strategies. Our project will engage women across different social groups on the differences between legal domestic and legal / illegal international trade of products to sure up jobs based on legal income through community education events and to promote women's empowerment.

Gender and social inclusion also influence the design of our project methods. Our researchers pay attention to labour divisions within the local setting, and acknowledge work done outside of fishing boats. It requires the inclusion of additional temporalities (before or after a fishing trip), other localities (houses, markets, etc.), and includes work with harder to reach members of the communities. Female researchers will be used for community dependence surveys, as they will likely gain easier access to those spaces than their male colleagues. By entering these additional spaces, the project will be able to connect fishing practices to additional aspects of livelihoods.

Our project team is of mixed genders with key influential roles being fulfilled by women including the Cefas project lead, MMAF's lead, and expert training consultant. The team will ensure equal gender representation where possible and encourage equality, for example by weighting female applications when recruiting PhD candidates to promote future female leaders. Where occupational gender biases are norm, we will ensure that the baseline ratio is maintained or improved. Active steps will be taken for ensuring equal opportunities are available for all genders at project events, whilst respecting any cultural norms within the different sectors consulted.

Q21. Change expected

Detail the expected changes to both illegal wildlife trade and poverty reduction this work will deliver. You should identify what will change and who will benefit, considering both people and species of focus a) in the short-term (i.e. during the life of the project) and b) in the long-term (after the project has ended) and the potential to scale the approach.

When talking about how people will benefit, please remember to give details of who will benefit, differences in benefits by gender or other layers of diversity within stakeholders, and the number of beneficiaries expected. The number of communities is insufficient detail – number of households should be the largest unit used.

Demand reduction projects should demonstrate their indirect links to poverty reduction.

We will improve the identification of endangered species (section Q8) and the understanding on the scale of the illegal trade of shark by ensuring that the national training programme developed for government officials during IWT057 is up-to-date, and its national roll-out continues. Specific modules will be provided to fisheries observers and enumerators, building the capability of those tasked with accurate species-specific data collection at landing sites where sharks enter the supply chain. We expect that by scaling training in species identification (> 120 staff from law enforcement, exit port authority, and technical implementing units, and > 75 fisheries observers from across Indonesia), the capability of trade regulators and enforcers to detect illegality in trade will increase, leading to a long-term reduction in illegal trade and the sustainable management of sharks in Indonesia.

Expert training in data-limited stock assessments and the development of NDFs will enable the Management and Scientific Authority to more effectively fulfil the needs of CITES as well as international fisheries management

conventions such as Indian Ocean Tuna Commission (IOTC) and the Western and Central Pacific Fisheries Commission (WCPFC). Indonesia will be better placed to implement and report on their convention commitments (see Q15) in the long-term, ensuring endangered species are harvested sustainably and shark populations are healthy and stable, whilst continuing to provide legal and sustainable livelihoods for people.

Our previous project (IWT057) took a top-down approach to build government capacity to detect illegally traded species. Here, we will disseminate advice and education to those involved in the trade at source (fishing, processing and trading), which is key for driving systematic change in the way shark trade routes and fisheries operate, and for tackling criminality within them. A core element (Output 3 & 4) of this project is to increase stakeholder engagement about, and increase compliance in, strengthened trade management systems. Through multi-sectoral workshops and a community-focused fisher education programme, we aim to promote sustainable fishing, lawful trade of shark products, and avoidance of potential prosecutions. This will benefit stakeholders by having more transparent commercial process, it will protect species by reducing their capture rates, and will ensure that the livelihoods of legally operating fishers and traders are protected.

By working with local stakeholders including fishers and their families (via community dependence surveys and "PhD Livelihoods") we aim to better understand the relative importance of fishing, processing, and trading sharks to food security and hunger reduction. Our project is designed to understand the gendered labour division and social dimensions of trade in CITES-listed sharks, including the income generated by processing the catch – not just income from the initial fishing activity alone. We will support poverty reduction by looking at all income sources generated from trade in sharks, and the impacts that national and international regulations have on these income sources. Our educational campaign (Output 4) will specifically raise awareness among women and other potentially marginalise groups, who are engaged in processing sharks, about the differences between legal domestic and legal / illegal international trade. This will ensure that generated income from traded products is legal and therefore sustainable for local livelihoods.

We will build on the previous success of having a PhD student aligned with our project by funding a further four Indonesian candidates (see Q17 for PhD details). These studentships offer personal development opportunities for successful candidates but also supports world-leading training of Indonesia's next generation of shark experts for the long-term legacy of the project. Each studentship will have a supervisory team comprised of experts from UK and Indonesian research institutes providing academic leadership, cutting-edge research facilities and local knowledge and context. We anticipate that by the end of the project, there will be four more Indonesian international experts that will go on to support Indonesia's and South-east Asian regional networks ambitions to having diverse and healthy populations of sharks for future generations.

The potential for and impact of change extends far beyond the geographic and taxonomic focus of this project. The methodologies developed are both scalable and transferable to shark fisheries in different jurisdictions as well as other groups of traded species and data-poor stock assessments across other tropical fisheries. Therefore, this project offers considerable potential to catalyse transformational change. Indonesia is a powerful influencer in the region and as current ASEAN chair, this project promotes leadership in sustainable management and reduction of IWT to other members.

Q22. Pathway to change

Please outline your project's expected pathway to change. This should be an overview of the overall project logic and outline <u>why and how</u> you expect your Outputs to contribute towards your overall Outcome and, in the longer term, your expected Impact.

International trade of shark products is a key driver in global illegal, unregulated and underreported (IUU) fishing pressure meaning that effective domestic fisheries management is critical to achieving sustainable international trade of commercially and illegal exploited species.

To deliver this, we will continue strengthening the national training programme, expanding the number and scope of those receiving training (cross-government stakeholders, enforcement agencies and fishers) (Output 2) to improve the generation and quality of fisheries and consumption (Output 4) and trade data (Output 3). This will underpin the continual development of data-limited species assessments and NDFs ("PhD [A] Assessments") to meet the increasing number of ratified international conservation and trade-related obligations (Output 1)).

Within the project lifetime we will increase private sector awareness of and compliance with conservation, fishing and legal trade regulations measured by conformance with trade monitoring systems (Output 3) and the application of novel DNA-based tools ("PhD [T] Tools") to reduce the pressure on endangered species (Outcome)

To better understand the relative importance and value of CITES-listed shark species to fishing communities (Output 4) and acknowledging its role in poverty reduction, we will conduct research ("PhD [L] Livelihoods") to explore the social-ecological role of shark fishing, processing, and trading for local communities (Output 4). The information gathered will be used to inform engagement events with fishing communities that consider their dependencies, livelihoods, and long-term well-being (Outcome). In addition, "PhD [G] Governance" will explore how these learnings on community dependence of legal trade of CITES-listed sharks can be incorporated in local, regional, and national policy implementation.

Long-term, scaled training programmes and the application of novel technologies, effective stakeholder engagement, and co-ordinated institutional capacity from shark capture to export or consumption (Project Impact) will ultimately reduce illegal trade, promote equitable fisheries, and protect biodiversity and livelihoods for future generations (Wider Impact).

Q23. Sustainable benefits and scaling potential

Q23a. How will the project reach a point where benefits can be sustained post-funding? How will the required knowledge and skills remain available to sustain the benefits? How will you ensure your data and evidence will be accessible to others?

Obligations under ratified treaties mandates countries to report on the management of shark fisheries and trade, with pressure to comply building as CBD and CITES come into full effect. Our project is critical for supporting Indonesia in meeting this need so whilst sustainable funding models are required for long-term support, the obligation to monitor and manage will only increase.

We will build monitoring capacity of current staff so the skills developed will be immediately applied in day-to-day duties. The national training programme developed in IWT057, will make this training accessible to new staff, sustaining increased identification capacity beyond the project.

PhD's have been designed to produce Indonesian leaders capable of growing their research area. This has been demonstrated by Dr Prasetyo (IWT057) who on completion of his PhD, assumed a government research position and is actively delivering training to colleagues and applying for competitive funding schemes to further his research.

Q23b. If your approach works, what potential is there for scaling the approach further? What might prevent scaling, and how could this be addressed?

Novel DNA-based tools for monitoring trade of CITES-listed species, and data-limited assessment methods (stock assessments and NDFs) that are developed and implemented in this project, are highly relevant and scalable to other geographies, and for other traded species. They provide a set of processes and methodologies that are not specific to the Indonesian context. One potential barrier to adoption of these approaches in other contexts is accessibility to the outputs. However, we will ensure results are published in open access peer-reviewed

publications by the associated PhD students and presented at scientific conferences, and we will share assessment methods with other Parties at international meetings. In addition, as a member of ASEAN (and current chair), Indonesia has the potential to influence others in implementing our approaches to support sustainable management and reduce IWT at a regional, ASEAN level.

If necessary, please provide supporting documentation e.g. maps, diagrams, references etc., as a PDF using the File Upload below:

IWTEXR9S21002 - Supporting Evidence
30/10/2023
17:10:14
pdf 2.34 MB

IWTEXR10S21002 Theory of change
30/10/2023
17:10:07
pdf 181.7 KB

Section 8 - Risk Management

Q24. Risk Management

Please outline the 6 key risks to achievement of your Project Outcome and how these risks will be managed and mitigated, referring to the Risk Guidance. This should include at least one Fiduciary, one Safeguarding, and one Delivery Chain Risk.

Risk Description	Impact	Prob.	Inherent Risk	Mitigation	Residual Risk
Fiduciary A large proportion of project funding will benefit in-country partners. Rekam are tasked with co-ordinating expenses for government staff involved in the project as they are unable to receive funds directly.	Moderate	Unlikely	Minor	A collaboration agreement will clearly state funding allocation, for all partners for each year. Past experience: an established mutually beneficial relationship demonstrates expenses are provided in good time, receipts/claim forms are accurately evidenced. REKAM is tasked with allocating budget to government staff - undertaken reliably with no issues raised.	Minor
Safeguarding Identify and mitigate risks where Cefas works with partners ensuring they are in-line with Cefas' safeguarding standards.	Moderate	Unlikely	Minor	Although Rekam does not have a current safeguarding policy, it will develop a social safeguarding protocol for this project, as required. Cefas will work with Rekam to establish a suitable protocol to fit the purposes of the project deliverables, aligning the two partner policies to ensure standards are met.	Minor

Delivery Chain Risk that aims and objectives are not being met due to scale of project e.g. studentships; sub-contracts, knowledge gaps.	Moderate	Unlikely	Minor	This model is based on a successful IWTCF project and is a scale-up of existing work (e.g PhD student element is tried and tested and will be replicated); sub-contracts are utilised where a previous relationship and knowledge base is established; activities are developed fitting capacity gaps to reach intended outcomes	Minor
Risk 4 The reputation of Cefas and Defra as well as partners could be affected if the project fails to deliver, or one entity comes into disrepute.	Possible	Major	Major	Cefas has a proven, excellent working relationship with project partners and is confident that delivery can be successfully achieved. A collaboration agreement will be put in place outlining all partner expectations and commitments. Rekam have an MOU with MMAF and work closely with government.	Minor
Risk 5 Potential for political changes in an ever-changing climate.	Possible	Major	Major	Cefas has excellent communication with the Embassy who help understand in-country context and can identify and adapt to challenges that arise. We have worked closely with MMAF for 5 years and many of the staff identified to work on this project have been involved from the start of the partnership.	Minor

Risk 6 Risk of unknowns for example with resources i.e staff/partners leaving and leaving skill gaps.	Possible	Major	Major	Cefas has experience of changing project partners and adjusting/handing over, with no overall project risk or adverse effect on deliverables. Cefas has a pool of scientists should a key player become unavailable e.g we can draw upon 20 stock assessors to fill expertise needed for this project.	Minor

Please upload your Risk Register, with Delivery Chain Risk Map, here.

IWTEXR10S21002 2023-Biodiversity-Challenge-Funds-Risk-Framework-Template-FINAL
30/10/2023
15:27:17
xlsx 101.56 KB

Section 9 - Project Sensitivities and Workplan

Q25. Project sensitivities

Please indicate whether there are sensitivities associated with this project that need to be considered if details are published (detailed species location data that would increase threats, political sensitivities, prosecutions for illegal activities, security of staff etc.).

⦿ No

Q26. Workplan

Provide a project workplan that shows the key milestones in project activities.

IWTEXR10S21002 BCF-Workplan-Template-2023-24
30/10/2023
17:16:06
docx 42.46 KB

Section 10 - Monitoring and Evaluation

Q27. Monitoring and evaluation (M&E)

Describe how the progress of the project will be monitored and evaluated, making reference to who is responsible for the project's M&E.

IWT Challenge Fund projects are expected to be adaptive and you should detail how the monitoring and evaluation will feed into the delivery of the project including its management. M&E is expected to be built into the project and not an 'add' on. It is as important to measure for negative impacts as it is for positive impact. Additionally, please indicate an approximate budget and level of effort (person days) to be spent on M&E (see Finance Guidance).

IWT Challenge Fund Extra Projects are required to commission an Independent Final Evaluation to report by the time that the project completes. The cost of this should be included in the project budget, and within the total project cost for M&E.

M&E will be Cefas led and managed under an ISO 9001:2015 accredited quality management system. Monthly project partner Teams calls will provide a platform for knowledge sharing and evaluation of the project's activities against the agreed log framework to ensure that any issues or problems are identified at an early stage. The Cefas project manager will also perform monthly budget reforecasting which is overseen at an organisational level as part of project management procedures.

Key to achieving the project outcome will be the coordination of the PhD studentships, the academic support, and the transfer of knowledge to government, sectoral and community stakeholders across the programme network. Effectiveness will be a key focus of the monitoring and evaluation plan to ensure all opportunities are maximised and where approaches are not working, we are able to pivot our approach to ensure we are best placed to have the impact set out in the log framework.

The project lead has been allocated time to not only ensure the scientific quality of the project is maintained throughout, but that the science to policy exchange is effective. Where this is not the case, the monitoring and evaluation process will explore what more can be done and what lessons can be applied. As part of this, the lead partner has allocated an annual budget to enable us to seek independent advice on our approach, and how it could be improved to achieve the project outcome.

The project partners, Rekam and MMAF, will be key in monitoring the project. They will be involved with the sharing and collection of project progression in country, submission of data from technical units, and collation of IWT incidences from law enforcement agencies, as well as ensure the timely administration of the projects e.g., processing of invoices. Monthly Teams calls and regular email and WhatsApp communication will provide the opportunity to regularly share progress, allow proactive adaption to the dynamics of the project, and ultimately ensure effective coordination and communication of project delivery across a broad range of stakeholders.

Throughout the project, we will be undertaking systematic monitoring of IWT case detections to track the effects and impacts of the project's outputs and activities. We will be monitoring private sector compliance with trade monitoring systems as demonstrated by an increase in the number of registered companies, compliance with allocated quotas and the number of violations recorded.

Monitoring and evaluation processes are in place to assess the on-the-ground implementation of the improved species-specific detection procedures. A post-workshop summary report including the collation of pre/post training test results will be produced for all species identification trainings to monitor the effectiveness for participants from a broad range of fishery and trade staff.

We will assess the effectiveness of stakeholder engagement by designing and conducting an impact assessment survey to measure private sector awareness of legal trade requirements and the consequences of illegal trading in year 1 and year 4 (pre and post awareness raising campaign).

Independent Final Evaluation (£)	[redacted]
Independent Final Evaluation (%)	[redacted]

Total project budget for M&E in GBP (this may include Staff, Travel and Subsistence costs)	[redacted]
Percentage of total project budget set aside for M&E (%)	[redacted]
Number of days planned for M&E	264

Section 11 - Logical Framework

Q28. Logical Framework (logframe)

IWT Challenge Fund projects will be required to monitor and report against their progress towards their Outputs and Outcome. This section sets out the expected Outputs and Outcome of your project, how you expect to measure progress against these and how we can verify this.

IWTEXR10S21002 BCF-St2-and-Single-Stage-Logical-Framework
30/10/2023
17:03:44
pdf 205.82 KB

Impact:

Reduced illegal fishing, bycatch, and trading of CITES-listed sharks in Indonesia, resulting from strengthened legal frameworks, safeguards national biodiversity and livelihoods, whilst supporting Indonesia's compliance with international treaties.

Outcome:

Illegal trade of CITES-listed sharks is reduced through better cohesion across authorities, bespoke tools and training for management staff, increased compliance with legal frameworks alongside community-focused catch reduction schemes.

Project Outputs

Output 1:

Increased institutional co-ordination across more than 9 government and research agencies involved in the management of Indonesia's shark fisheries and trade, facilitates greater compliance with international treaties (e.g., CITES, RFMOs - IOTC) by March 2028.

Output 2:

Institutional capacity in data collection and monitoring is strengthened by scaling existing initiatives (IWT057), promoting accurate species identification among >100 management and law enforcement staff (by March 2026), and through the application of novel trade monitoring technologies (by March 2028).

Output 3:

Engagement with the private sector drives increased compliance of traders operating within legal frameworks and enables estimates of the illegal component of trade to be established by March 2028.

Output 4:

Local fisheries management interventions including bycatch mitigation schemes in two communities, and engagement with > 300 households across four shark fishing communities, provides evidence of the scale of community dependence for food security while supporting on-the-ground protection of CITES-listed sharks by March 2028.

Output 5:

No Response

Do you require more Output fields?

⦿ No

Activities

Each activity is numbered according to the Output that it will contribute towards, for example, 1.1, 1.2, 1.3 are contributing to Output 1.

Output 1. Increased institutional co-ordination across more than nine government and research agencies involved in the management of Indonesia's shark fisheries and trade, facilitates greater compliance with international treaties (e.g., CITES, RFMOs - IOTC) by March 2028.

1.1. Recruit four PhD students (3 x IPB, 1 x LJMU).
1.2. Design/ conduct a short quantitative survey of women engaged in IWT057 to understand potential barriers to inclusion of women in project activities.
1.3. Conduct national and regional workshops to map the management of sharks from capture to consumption or export.
1.4. Produce brief report collating outputs from 1.3, including organograms and recommendations for improvement actions.
1.5. Draft ToR, establish membership and hold bi-annual cross-government meetings to action recommendations outlined in 1.4.
1.6. Deliver technical workshop on data-limited stock assessment methods to government, academia, and NGOs.

1.7. Deliver technical workshop on the development of CITES NDFs for sharks and rays.
1.8. Online knowledge-exchange meetings between Cefas and BRIN scientists who attend and contribute to RFMO meetings (IOTC SC and WPEB).

Output 2. Institutional capacity in data collection and monitoring is strengthened by scaling existing initiatives (IWT057), promoting accurate species identification among >100 management and law enforcement staff (by March 2026), and through the application of novel trade monitoring technologies (by March 2028).

2.1 Update MMAF training modules to include new CITES listed species (CoP19, 2022).
2.2 Review, translate, produce, and distribute updated ID guides including new CITES-listed species.
2.3 Design a one-day training workshop titled 'A standardised method to collect DNA samples'.
2.4 Run a three-day visual ID (updated in 2.1) workshop for expert trainers, and report on pre/post training test results.
2.5 Expert trainers deliver visual species identification workshops to fisheries (observers, enumerators) and trade (law enforcement, technical unit) staff.
2.6 "PhD Tools" develops lab-in-the-field method to support warehouse inspections and conduct national assessment of shark products in trade.
2.7 Develop a Standard Operating Procedure for using molecular-based monitoring at local and exit ports, and

present to MMAF in a policy brief.

Output 3. Engagement with the private sector drives increased compliance of traders operating within the legal framework and enables estimates of the illegal component of trade to be established by March 2028.

3.1 “PhD Livelihoods” design and conduct pre/post project impact assessment of fishers, processors, sellers, traders, and exporters on knowledge of legal trade frameworks
3.2 Identify key stakeholders for involvement in the project’s stakeholder steering group (SSG), agree schedule/timings of bi-annual workshops, and develop SSG’s Terms of Reference
3.3 Host bi-annual SSG workshops to communicate the implementation of monitoring and evaluation of trade management systems.
3.4 Design, conduct and report annual survey of private sector compliance with allocated quotas.
3.5 Design and run training workshop for law enforcement staff and customs officials in legal trade monitoring systems and visual identification.
3.6 Design, conduct and report annual technical unit trade monitoring inspections, detected violations and cases of illegal trade.

Output 4. Local fisheries management initiatives including bycatch mitigation schemes in two communities, and engagement with > 300 households across four shark fishing, provides evidence of the scale of community dependence for food security while supporting on-the-ground protection of CITES-listed sharks by March 2028.

4.1 Information gathered during workshops (1.2) is used to produce a map of data flow from capture to consumption/export which is included a summary report (1.3).
4.2 Collect and report (1.3) information on standardised data recording by technical units and the flow of data to the directorate and BRIN.
4.3 With BRIN, provide recommendations for improving the quality of data and how it can be made available for formulating NDFs, stock assessments and quotas.
4.4 Develop educational materials (videos, leaflets, posters) for fishers and wider village communities to raise awareness of the ecological importance and protection of elasmobranchs.
4.5 Deliver fisher awareness raising events in four important fishing communities throughout Indonesia.
4.6 “PhD Livelihoods” design and conducts interviews across four sites (shark catchers, processers, and sellers) to understand community (gender-specific) dependence on sharks for food security.
4.7 Invite and recruit fishers from local communities to participate in a programme of biological data collection and live release of wedgefish.
4.8 Deliver training workshops to participating fishers in communities in Northen Java.
4.9 Collate fisher self-reported data on live releases and biological data collection and summarise in a brief report.
4.10 Perception study on tuna fishers’ awareness of RFMO requirements and willingness to reduce bycatch is designed, conducted, and prepared for peer reviewed publication.
4.11 Best practise shark handling and release guides are designed and produced.
4.12 Training provided to participating fishers in improving data collection and improved shark handling and release based on results from 4.10.
4.13 Design, conduct and report a post engagement and training impact survey of tuna fishing companies participating in 4.10.

Section 12 - Budget and Funding

Q29. Budget

Please complete the appropriate Excel spreadsheet which provides the Budget for this application and ensure the Summary page is fully completed. Some of the questions earlier and below refer to the information in this spreadsheet.

IWTEXR10S21002 BCF-Budget-over-£100k-MASTER-V3 FINAL
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Q30. Alignment with other funding and activities

We expect projects to clearly demonstrate that they are additional and complementary to other activities and funding in the same geographic/thematic area or region.

Are you aware of any other organisations/projects carrying out or planning activities, or applying for funding for similar work in this geography or sector?

◉ Yes

If yes, please give details explaining similarities and differences, and explaining how your work will be additional, avoiding duplicating and conflicting activities and what attempts have been/will be made to co-operate with and share lessons learnt for mutual benefit.

Our project has been designed to be complementary to other funded/potentially funded activities in Indonesia.

Unique to our project is that we are operating across national, regional, and local scales and addressing the interplay between shark fisheries and trade, using a top-down and a bottom-up approach. However, we acknowledge the importance of integrating with other projects that are operating at each of these scales. For example, we are aware of a current Stage 2 application to the Biodiversity Challenge Fund by the Indonesia Ocean Justice Initiative who are working with regional government agencies to address illegal fisheries in Central Java. We have proposed activities in Central Java under our project, but after jointly discussing our applications, we understand them to be distinct in their objectives. We do recognise the value in regular engagement if our projects are successful and have agreed to regular coordination meetings to share progress and lessons learned.

At the local scale we will be closely coordinating with Dr Hollie Booth and Darwin Initiative project (ref 30-008) through our proposed activities in Output 4, and through joint supervision of “PhD Livelihoods”. We have already developed this synergistic partnership through added-value funding obtained by Cefas to produce wedgefish handling and release guides (see supporting evidence), and for the initiation of a fisher-led tagging programme to understand the discard survival of bycaught wedgefish. We will build on this further through activities outlined in Output 4, and Dr Booth will be involved in our project coordination meetings as a PhD supervisor. We believe this level of collaboration in activities will increase the value from each of the projects and deliver greater impact for Indonesia and the Biodiversity Challenge Fund.

Q31. Balance of budget spend

Defra are keen to see as much IWT Challenge Fund funding as possible directly benefiting communities and economies. While it is appreciated that this is not always possible every effort should be made for funds to remain in-country.

Explain the thinking behind your budget in terms of where IWT Challenge Fund funds will be spent. What benefits will the country/ies see from your budget? What level of the award do you expect will be spent locally? Please explain the decisions behind any IWT Challenge Fund funding that will not be spent locally and how those costs are important for the project.

We have allocated 68% of the total budget to in-country partners including REKAM for delivery of on-the-ground activities and to provide support to Indonesian government staff (who cannot receive external funds themselves), and IPB to support the costs associated with three PhD studentships. Costs for the fourth studentship sit outside of the in-country allocation as the funds will be directed to Liverpool John Moores University (LJMU) in the UK. However, these costs will provide the Indonesian student with a stipend (UKRI level) to cover UK living expenses and budget for consumables. As LJMU have waivered international fees as their matched funding contribution, LJMU costs directly benefit the development of the student.

Costs associated with contracting international experts to deliver world-leading training, such as species identification training or developing NDFs, are included in the lead partner budget (32%). This budget also includes costs to manage the delivery of the project, PhD supervision and delivery of activities including training in data-limited stock assessment methods to build capacity of government scientists in Indonesia.

Q32. Value for Money

Please demonstrate why your project is good value for money in terms of impact and cost-effectiveness of each pound spend (economy, efficiency, effectiveness and equity).

This project is designed on foundations of a strong project collaboration which was recognised by the reviewer of our last Annual Report Review (IWT057), who stated “I suspect this new partnership between Cefas and the Ministry of Marine Affairs and Fisheries could go on to more ambitious targets given the success it had under this, first project together…. This is a great project in the IWT Challenge Fund portfolio". We believe this working partnership therefore offers a high chance of success in delivering the next stage of our ambition.

Most of the budget ([redacted] is allocated to our in-country partners and will be spent in Indonesia. An additional (£[redacted] or [redacted] of the UK budget is allocated to support PhDs hosted at UK Universities but the recipients of these will be Indonesian nationals who will be the main beneficiaries. Our project partners have also confirmed in-kind contributions in terms of staff time and overhead costs in recognition of the benefit that all partners will gain from the outcomes of the project.

Cefas has track-record in the cost effective and efficient delivery of high value projects and programmes. The budget for this project has been built based on Cefas’ experience in undertaking international capacity building work and considers our current experience of managing projects in Indonesia (IWT057). Cefas has a comprehensive project management system to ensure project resources are managed and used transparently. The assigned project manager is responsible for managing project funds and as an executive agency of Defra, all travel expenditure must meet Defra policy on travel allowances which conform with the Foreign Commonwealth Office Worldwide Subsistence Rates.

Q33. Capital items

If you plan to purchase capital items with IWT Challenge Fund funding, please indicate what you anticipate will happen to the items following project end. If you are requesting more than 10% capital costs, please provide your justification here.

No capital items to be purchased.

Section 13 - Safeguarding and Ethics

Q34. Safeguarding

All projects funded under the Biodiversity Challenge Funds must ensure proactive action is taken to promote the welfare and protect all individuals involved in the project (staff, implementing partners, the public and beneficiaries) from harm. In order to provide assurance of this, projects are required to have specific procedures and policies in place.

Please upload the following required policies:

- **Safeguarding Policy: including a statement of commitment to safeguarding and a zero tolerance statement on bullying, harassment and sexual exploitation and abuse.**
- **Whistleblowing Policy: which details a clear process for dealing with concerns raised and protects whistle blowers from reprisals.**
- **Code of Conduct: which sets out clear expectations of behaviours – inside and outside the workplace – for all involved in the project and makes clear what will happen in the event of non-compliance or breach of these standards, including compliance with IASC 6 Principles.**

If any of these policies are integrated into a broader policy document or handbook, please upload just the relevant or equivalent sub-sections to the above policies, with (unofficial) English translations where needed.

Please outline how (a) beneficiaries, the public, implementing partners, and staff are made aware of your safeguarding commitment and how to confidentially raise a concern, (b) safeguarding issues are investigated, recorded and what disciplinary procedures are in place when allegations and complaints are upheld, (c) you will ensure project partners uphold these policies.

If your approach is currently limited or in the early stages of development, please clearly set out your plans address this.

Cefas has a recognised code of conduct clarifying values, principles, and acceptable behaviours. These are easily accessible to managers, employees and anyone formally representing Cefas. There will be a regular sense check of policies and practices, which underpin the code of conduct to assure these adhere to the Civil Service Code and the Civil Service Recruitment Principles.

Cefas has a clear, confidential method for reporting safeguarding concerns that is accessible to employees and members of the public/ external partners. Clear governance routes for safeguarding matters will be visible, including whistleblowing, discipline and grievance policies and practices. Cefas is finalising its Sexual Exploitation, Abuse and Harassment (SEAH) policy for all overseas work, aligning with Defra's SEAH policy and the zero tolerance, 'do no harm' principles. Governance, and supporting safeguarding policies and practices should be transparent, and timelines for action clear so not to deter people from coming forward and raising concerns.

There is a need to identify and mitigate risks. Where Cefas works with variable partners, it will be considered if safeguarding should be a separate risk category in the risk register. As Project Lead Cefas will ensure its Safeguarding procedures are cascaded to all partners and are regularly reviewed.

Q35. Ethics

Outline your approach to meeting the key principles of good ethical practice, as outlined in the guidance.

Partners will discuss the legal and ethical obligations for ensuring access and benefit sharing and where not available, we will build on previous experience to develop best practice guidance.

Strong leadership and participation through national PhD students, local implementing team (REKAM) working

with private sector stakeholders and fishing communities, and MMAF providing policy direction, is core to success. Our research also focuses on understanding local perspectives and traditional knowledge to assess potential effects of changing policies. Before collecting data, we will inform community leaders why and how information is gathered, and all research will go through ethical review processes. Credibility of findings will be demonstrated by publishing in open access peer-reviewed journals.

Cefas has a duty of care for health and safety and provides staff with training to complete work safely. REKAM operate under their own standards, designed for working in the local context.

Cefas will process all personal information in line with (i) the UK GDPR and any applicable national implementing Laws as amended from time to time; (ii) the Data Protection Act 2018 to the extent that it relates to Processing of personal data and privacy; (iii) all applicable Law about the Processing of personal data and privacy.

Section 14 - FCDO Notifications

Q36. British embassy or high commission engagement

It is important for UK Government representatives to understand if UK funding might be spent in the project country/ies. Please indicate if you have contacted the relevant British embassy or high commission to discuss the project and attach details of any advice you have received from them.

⦿ Yes

Please attach evidence of request or advice if received.

IWTEXR10S21002 C8624 Q35 Response
30/10/2023
16:18:12
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Section 15 - Project Staff

Q37. Project staff

Please identify the core staff (identified in the budget), their role and what % of their time they will be working on the project.

Please provide 1-page CVs or job description, further information on who is considered core staff can be found in the Finance Guidance.

Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Joanna Murray	**Project Leader**	17	Checked
Charlotte Jessop	Cefas Project Manager	7	Checked
Sophy Phillips	Stock Assessment Lead	5	Checked
Paula Schiefer	Cefas Social Scientist Lead	7	Checked

Do you require more fields?

⦿ Yes

Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Tom Catchpole	Cefas Principal Fisheries Advisor	3	Checked
Kirsty Bradley	Cefas Communications Design	5	Checked
Efin Muttaqin	Project Leader	70	Checked
Irfan Yulianto	Technical Advisor	15	Checked
Yudi Herdiana	Technical Advisor	15	Checked
Oktavianto Darmono	Private Sector Engagement Coordinator	80	Checked
Budy Wiryawan	Senior Advisor - Stock assessment	10	Checked
Toni Ruchimat	Senior Advisor - International convention	10	Checked

Please provide 1 page CVs (or job description if yet to be recruited) for the project staff listed above as a combined PDF.

IWTEXR10S21002 Stage 2 Cefas CVs
30/10/2023
17:19:14
pdf 4.05 MB

Have you attached all project staff CVs?

⦿ No

If you cannot provide a CV or job description, please explain why not.

Additional staff Heidi Retnoningtyas - Government Liaison Coordinator has a CV which is included in the attachment but there is not space in the table above.
Aisyah N Nabila - Program Officer and Neni Nuraeni - Finance Manager are included on the budget spreadsheet as core staff. CV's are not included but can be provided.

Section 16 - Project Partners

Q38. Project Partners

Please list all the Project Partners (including the Lead Partner who will administer the grant and coordinate the delivery of the project), clearly setting out their roles and responsibilities in the project including the extent of their engagement so far. This section should demonstrate the capability and capacity of the Project Partners to successfully deliver the project.

Lead partner name:	Centre for Environment, Fisheries and Aquaculture Science (Cefas)
Website address:	https://www.Cefas.co.uk/
Why is this organisation the Lead Partner, and what value to they bring to the project? (including roles, responsibilities and capabilities and capacity):	Our role in this IWT project is to support capacity building for the Indonesian government to better detect, and therefore regulate, illegal shark trade and develop science-based policy recommendations. This is supported by our experience in managing high value projects and supporting the UK government in fisheries advice. The project will contribute to sharing of information and procedures relating to sustainable fisheries and trade management, design of social surveys (fisher and trade surveys), science-led policy advice, and capacity building within the regulation of shark trade. Cefas will be responsible for overall project management, monitoring, evaluation, and reporting, as well as providing technical advice and knowledge sharing with project partners. Specifically, we will: · Provide overall project and budget management · Lead all project reporting · Map UK fisheries data journey · Attend/deliver fisheries data mapping, species ID training, stock assessment and NDF workshops · Ensure data and project information is made publicly available · Provide specialist scientific and technical advice · Provide supervisors for PhD studentships
International/ In-country Partner	International
Allocated budget (proportion or value):	£[redacted]
Representation on the Project Board (or other management structure):	⊙ Yes
Have you included a Letter of Support from this organisation?	⊙ Yes
Have you provided a cover letter to address your Stage 1 feedback?	⊙ Yes

Do you have partners involved in the Project?

⊙ Yes

1. Partner Name:	Rekam Jejak Alam Nusantara Foundation (Rekam Nusantara Foundation; RNF)
Website address:	https://rekam.org/ www.perikanan.org

What value does this Partner bring to the project? (including roles, responsibilities and capabilities and capacity):	RNF is an Indonesian non-government organization conducting biodiversity projects and communicating the findings to a range of communities through creative media to increase awareness and understanding of environmental issues, culture, natural resource sustainability, indigenous peoples, and climate change. RNF's conservation programs cover terrestrial and marine areas, including hornbill conservation, capture fisheries management, shark and ray conservation, ocean spatial management, and combating illegal wildlife trade. RNF has been working on these topics in collaboration with a range of parties, including central government (ministries and national institutions), local governments, universities, and Non-Government Organizations since 2013. In 2015 RNF launched a campaign and awareness program on sharks and rays in West Nusa Tenggara, Aceh, and North Sulawesi. Since 2019, RNF has worked closely with MMAF to develop an awareness program, capacity building and collaboration with fisheries management in Central Java and has national scope to support CITES implementation. In this project, RNF will be the projects focal point in Indonesia. They will further develop the capacity building program to increase stakeholder awareness, consultation, and coordination, on the implementation trade system monitoring and fisheries data management. RNF will lead the development of the educational programme with fishers and coordinate the delivery of in-country workshops.
International/ In-country Partner	In-country
Allocated budget (proportion or value):	£[redacted]
Representation on the Project Board (or other management structure):	⊙ Yes
Have you included a Letter of Support from this organisation?	⊙ Yes

2. Partner Name:	Directorate of Conservation and Marine Biodiversity, Ministry of Marine Affairs and Fisheries (MMAF)
Website address:	https://kkp.go.id/djprl/kkhl

What value does this Partner bring to the project? (including roles, responsibilities and capabilities and capacity):	The Indonesian Government have a strong commitment to reducing the trade of CITES protected fauna and flora. This project will deliver management of legal trade while tackling illegal trade. The Directorate of Conservation and Marine Biodiversity within MMAF is responsible for the management of conservation areas and marine biodiversity which encompasses regulation of threatened species under international conventions including CITES. Directorate staff will be engaged in training workshops with project partners and will be responsible for providing guidance and recommendations for the improved species identification and customs procedures (field officers, BPSPL offices, customs agencies). Trained staff within the Directorate will be tasked with on-going training and implementation to ensure long-term sustainability of the project. Specifically, MMAF will: · Provide information and data on compliance with trade monitoring systems for elasmobranch products · Facilitate continued training of 20 Indonesian elasmobranch trade regulators (trainers' team). · Allocate staff to shadow IOTC management and scientific staff at international conventions. · Provide coordination with national/provincial agencies.
International/ In-country Partner	In-country
Allocated budget (proportion or value):	£[redacted]
Representation on the Project Board (or other management structure):	⊙ Yes
Have you included a Letter of Support from this organisation?	⊙ Yes

3. Partner Name:	Research Centre for Conservation of Marine and Inland Water Resources, National Research and Innovation Agency (NRIA)
Website address:	https://brin.go.id/en

What value does this Partner bring to the project? (including roles, responsibilities and capabilities and capacity):	BRIN has grown to become a "fresh modern research institution" by presenting quality research results and providing real benefits to the wider community. The Research Centre for Conservation of Marine and Inland Water Resources is focused on tackling the most pressing threat of the 21st century: biodiversity loss, especially aquatic biodiversity, by advancing research on three conservation levels, i.e., ecosystem, species, and genetics. With more than 60 researchers with various expertise and a wealth of experience, they will contribute significantly to the project. NRIA's facilities are a powerhouse of research, with the most advanced in the country to support frontier research, such as the National Integrated Centre for Genomic, Tropical Biodiversity, and Environment (Genomic Laboratory) and the Integrated Oceanographic Research Laboratory (LATERIO). Participating in the project will further cement our trajectory and ensure that we play an important role in reserving Indonesian biodiversity, including the population of sharks and rays, for many years to come. Andhika Prasetyo is based at NRIA and will be driving the development of practical lab-in-the-field molecular tools to identify species in trade. Andhika will design the DNA sampling course and provide academic mentoring to "PhD Tools".
International/ In-country Partner	In-country
Allocated budget (proportion or value):	£[redacted]
Representation on the Project Board (or other management structure):	⊙ Yes
Have you included a Letter of Support from this organisation?	⊙ Yes

4. Partner Name:	*No Response*
Website address:	*No Response*
What value does this Partner bring to the project? (including roles, responsibilities and capabilities and capacity):	*No Response*
International/ In-country Partner	*No Response*
Allocated budget (proportion or value):	£0.00

Representation on the Project Board (or other management structure):	○ Yes ○ No
Have you included a Letter of Support from this organisation?	○ Yes ○ No

5. Partner Name:	*No Response*
Website address:	*No Response*
What value does this Partner bring to the project? (including roles, responsibilities and capabilities and capacity):	*No Response*
International/ In-country Partner	*No Response*
Allocated budget (proportion or value):	£0.00
Representation on the Project Board (or other management structure):	○ Yes ○ No
Have you included a Letter of Support from this organisation?	○ Yes ○ No

6. Partner Name:	*No Response*
Website address:	*No Response*
What value does this Partner bring to the project? (including roles, responsibilities and capabilities and capacity):	*No Response*
International/ In-country Partner	*No Response*
Allocated budget (proportion or value):	£0.00

Representation on the Project Board (or other management structure):	○ Yes ○ No
Have you included a Letter of Support from this organisation?	○ Yes ○ No

If you require more space to enter details regarding Partners involved in the project, please use the text field below.

Directorate of Conservation and Marine Biodiversity, Ministry of Marine Affairs and Fisheries (MMAF) and Research Centre for Conservation of Marine and Inland Water Resources, National Research and Innovation Agency (NRIA) are not able to receive funds directly therefore monies are allocated, via the Lead Partner, to REKAM who will facilitate their participation in project activities.

Please provide a combined PDF of all letters of support in the order they are presented in the table.

IWTEXR10S21002 All Letters of Support
30/10/2023
16:52:17
pdf 1.23 MB

Section 17 - Lead Partner Capability and Capacity

Q39. Lead Partner Capability and Capacity

Has your organisation been awarded Biodiversity Challenge Funds (Darwin Initiative, Darwin Plus or Illegal Wildlife Trade Challenge Fund) funding before (for the purposes of this question, being a partner does not count)?

◉ Yes

If yes, please provide details of the most recent awards (up to 6 examples).

Reference No	Project Leader	Title
IWT057	Cefas	Building capacity to reduce illegal trade of shark products -Indonesia
DPLUS079	Cefas	Improving Sustainability of Marine Management in Montserrat
DPLUS112	Cefas	Capacity building in fisheries evidence, networks and management (Virgin Islands)
DPLUS067	Cefas	Regional collaboration to achieve sustainable Caribbean fisheries management
No Response	*No Response*	*No Response*

No Response	*No Response*	*No Response*

Have you provided the requested signed audited/independently examined accounts?

⊙ Yes

Section 18 - Certification

Certification

On behalf of the

Company

of

Centre for Environment, Fisheries & Aquaculture Science

I apply for a grant of

£1,486,440.00

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

(This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)

- I have enclosed CVs for key project personnel, a cover letter, letters of support, a budget, risk register (inclusive of delivery chain risk map), logframe, theory of change, Safeguarding and associated policies, and project workplan (uploaded at appropriate points in the application).
- Our last two sets of signed audited/independently verified accounts and annual report (covering three years) are also enclosed.

Checked

Name	Tim Green
Position in the organisation	Deputy Chief Executive and Chief Operating Officer
Signature (please upload e-signature)	IWTEXR10S21002 Certification 30/10/2023 16:56:40 pdf 145.71 KB
Date	30 October 2023

Please attach the requested signed audited/independently examined accounts.

IWTEXR10S21002 Cefas Accounts 2022-2023
30/10/2023
16:57:04
pdf 5.34 MB

IWTEXR10S21002 Cefas Accounts 2021-2022
30/10/2023
16:56:53
pdf 4.02 MB

Please upload the Lead Partner's Safeguarding Policy as a PDF

IWTEXR10S21002 Whistleblowing and Code of Conduct
30/10/2023
16:59:11
pdf 217.77 KB

IWTEXR10S21002 Cefas Safeguarding Guidance V2
30/10/2023
16:59:04
pdf 106.69 KB

Section 19 - Submission Checklist

Checklist for submission

	Check
I have read the Guidance**, including the "IWT Challenge Fund Guidance", "Monitoring Evaluation and Learning Guidance", "Standard Indicator Guidance", "Risk Guidance", "Theory of Change Guidance" and "Finance Guidance".**	Checked
I have read, and can meet, the current Terms and Conditions **for this fund.**	Checked
I have provided actual start and end dates for the project.	Checked
I have provided my budget based on UK government financial years i.e. 1 April – 31 March and in GBP.	Checked
I have checked that our budget is complete, correctly adds up and I have included the correct final total at the start of the application.	Checked
The application been signed by a suitably authorised individual (clear electronic or scanned signatures are acceptable).	Checked
I have attached the below documents to my application: • **a cover letter from the Lead Partner**	Checked
• **my risk register, including delivery chain risk map, as an Excel file using the template provided.**	Checked
• **my completed logframe as a PDF using the template provided and using "Monitoring Evaluation and Learning Guidance" and "Standard Indicator Guidance".**	Checked
• **my 1 page Theory of Change as a PDF which includes the key elements listed in the guidance**	Checked
• **my budget (which meets the requirements above) using the template provided.**	Checked
• **a signed copy of the last 2 annual report and accounts (covering three years) for the Lead Partner, or provided an explanation if not.**	Checked
• **my completed workplan as a PDF using the template provided.**	Checked
• **a copy of the Lead Partner's Safeguarding Policy, Whistleblowing Policy and Code of Conduct (Question 34).**	Checked

• 1 page CV or job description for all the Project Staff **identified at Question 37, including the Project Leader, or provided an explanation of why not, combined into a single PDF.**	Checked
• a letter of support from the Lead Partner and partner(s) identified at Question 38, or an explanation of why not, as a single PDF.	Checked
I have been in contact with the FCDO in the project country(ies) and have included any evidence of this. If not, I have provided an explanation of why not.	Checked
My additional supporting evidence is in line with the requested evidence, amounts to a maximum of 5 sides of A4, and is combined as a single PDF.	Checked
(If copying and pasting into Flexi-Grant) I have checked that all my responses have been successfully copied into the online application form.	Checked
I have checked the IWT Challenge Fund website **immediately prior to submission to ensure there are no late updates.**	Checked
I have read and understood the Privacy Notice on the IWT Challenge Fund website.	Checked

We would like to keep in touch!

Please check this box if you would be happy for the lead applicant (Flexi-Grant Account Holder) and project leader (if different) to be added to our mailing list. Through our mailing list we share updates on upcoming and current application rounds under the IWT Challenge Fund and our sister grant scheme, the Darwin Initiative. We also provide occasional updates on other UK Government activities related to biodiversity conservation and share our quarterly project newsletter. You are free to unsubscribe at any time.

Checked

Data protection and use of personal data

Information supplied in the application form, including personal data, will be used by Defra as set out in the **Privacy Notice**, available from the Forms and Guidance Portal.

This **Privacy Notice must be provided to all individuals** whose personal data is supplied in the application form. Some information may be used when publicising the IWT Challenge Fund including project details (usually title, lead partner, project leader, location, and total grant value).

Project Title: Strengthening Indonesia's capacity to reduce illegal shark fisheries and trade

	Activity	No. of months	Year 1 (24/25)				Year 2 (25/26)				Year 3 (26/27)				Year 4 (27/28)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1	Increased institutional co-ordination across more than 9 government and research agencies involved in the management of Indonesia's shark fisheries and trade, facilitates greater compliance with international treaties (e.g., CITES, RFMOs - IOTC) by March 2028.																	
1.1	Recruit four PhD students (3 x IPB, 1 x LJMU).	4		x	x													
1.2	Design/ conduct a short quantitative survey of women engaged in IWT057 to understand potential barriers to inclusion of women in project activities.	1		x														
1.3	Conduct national and regional workshops to map the management of sharks from capture to consumption or export.	1		x														
1.4	Produce brief report collating outputs from 1.3, including organograms and recommendations for improvement actions.	1				x												
1.5	Draft ToR, establish membership and hold bi-annual cross-government meetings to action recommendations outlined in 1.4.	47		x		x		x		x		x		x		x		x
1.6	Deliver technical workshop on data-limited stock assessment methods to government, academia, and NGOs.	2								x			x					
1.7	Deliver technical workshop on the development of CITES NDFs for sharks and rays.	2									x			x				

	Activity	No. of months	Year 1 (24/25)				Year 2 (25/26)				Year 3 (26/27)				Year 4 (27/28)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.8	Online knowledge-exchange meetings between Cefas and BRIN scientists who attend and contribute to RFMO meetings (IOTC SC and WPEB).	47			x	x			x	x			x	x			x	x
Output 2	Enhanced institutional capacity in data collection and monitoring is strengthened by scaling existing initiatives (IWT057), promoting accurate species identification among >100 management and law enforcement staff (by March 2026), and through the application of novel trade monitoring technologies (by March 2028).																	
2.1	Update MMAF training modules to include new CITES listed species (CoP19, 2022).	6		x	x													
2.2	Review, translate, produce, and distribute updated ID guides including new CITES-listed species.	6		x	x													
2.3	Design a one-day training workshop titled 'A standardised method to collect DNA samples'.	2			x													
2.4	Run a three-day visual ID (updated in 2.1) workshop for expert trainers, and report on pre/post training test results.	1				x												
2.5	Expert trainers deliver visual species identification workshops to fisheries (observers, enumerators) and trade (law enforcement, technical unit) staff.	12					x	x	x	x								
2.6	"PhD Tools" develops lab-in-the-field method to support warehouse inspections and conduct national	15						x	x	x	x	x						

	Activity	No. of months	Year 1 (24/25)				Year 2 (25/26)				Year 3 (26/27)				Year 4 (27/28)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	assessment of elasmobranch products in trade.																	
2.7	Develop a Standard Operating Procedure for using molecular-based monitoring at local and exit ports, and present to MMAF in a policy brief.	6										x	x	x				
Output 3	Engagement with the private sector drives increased compliance of traders operating within the legal framework and enables estimates of the illegal component of trade to be established by March 2028.																	
3.1	"PhD Livelihoods" design and conduct pre/post project impact assessment of fishers, processors, sellers, traders, and exporters on knowledge of legal trade frameworks.	6				x	x											
3.2	Identify key stakeholders for involvement in the project's stakeholder steering group (SSG), agree schedule/timings of bi-annual workshops, and develop SSG's Terms of Reference.	4		x	x													
3.3	Host bi-annual SSG workshops to communicate the implementation of monitoring and evaluation of trade management systems.	40				x		x		x		x		x		x		x
3.4	Design, conduct and report annual survey of private sector compliance with allocated quotas.	40				x				x				x				x
3.5	Design and run training workshop for law enforcement staff and customs	6						x	x	x								

	Activity	No. of months	Year 1 (24/25)				Year 2 (25/26)				Year 3 (26/27)				Year 4 (27/28)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	officials in legal trade monitoring systems and visual identification.																	
3.6	Design, conduct and report annual technical unit trade monitoring inspections, detected violations and cases of illegal trade.	40				x				x				x				x
Output 4	Local fisheries management initiatives including bycatch mitigation schemes in two communities, and engagement with > 300 households across four shark fishing, provides evidence of the scale of community dependence for food security while supporting on-the-ground protection of CITES-listed sharks by March 2028.																	
4.1	Information gathered during workshops (1.2) is used to produce a map of data flow from capture to consumption/export which is included a summary report (1.3).	1				x												
4.2	Collect and report (1.3) information on standardised data recording by technical units and the flow of data to the directorate and BRIN.	1				x												
4.3	With BRIN, provide recommendations for improving the quality of data and how it can be made available for formulating NDFs, stock assessments and quotas.	6				x	x											
4.4	Develop educational materials (videos, leaflets, posters) for fishers and wider village communities to raise awareness	6						x	x									

	Activity	No. of months	Year 1 (24/25)				Year 2 (25/26)				Year 3 (26/27)				Year 4 (27/28)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	of the ecological importance and protection of elasmobranchs.																	
4.5	Deliver fisher awareness raising events in four important fishing communities throughout Indonesia.	9								x	x	x						
4.6	"PhD Livelihoods" design and conducts interviews across four sites (shark catchers, processers, and sellers) to understand community (gender-specific) dependence on sharks for food security.	12					x	x	x	x								
4.7	Invite and recruit fishers from local communities to participate in a programme of biological data collection and live release of wedgefish.	6			x	x												
4.8	Deliver training workshops to participating fishers in communities in Northen Java.	12					x	x	x	x								
4.9	Collate fisher self-reported data on live releases and biological data collection and summarise in a brief report.	6														x	x	
4.10	Perception study on tuna fishers' awareness of RFMO requirements and willingness to reduce bycatch is designed, conducted, and prepared for peer reviewed publication.	6					x	x			x	x						
4.11	Best practise shark handling and release guides are designed and produced.	3									x	x						
4.12	Training provided to participating fishers in improving data collection and improved shark handling and release based on results from 4.10.	6										x	x	x				

	Activity	No. of months	Year 1 (24/25)				Year 2 (25/26)				Year 3 (26/27)				Year 4 (27/28)			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
4.11	Design, conduct and report a post engagement and training impact survey of tuna fishing companies participating in 4.9.	6													x	x	x	

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
Impact: Reduced illegal fishing, bycatch, and trading of CITES-listed sharks in Indonesia, resulting from strengthened legal frameworks, safeguards national biodiversity and livelihoods, whilst supporting Indonesia's compliance with international treaties. (Max 30 words)			
Outcome: (Max 30 words) Illegal trade of CITES-listed sharks is reduced through better cohesion across authorities, bespoke tools and training for management staff, increased compliance with legal frameworks alongside community-focused catch reduction schemes.	0.1 Governance and management of sharks and derived products from capture to consumption or export is mapped, recommendations for improvements made and actioned, and training in species assessments (NDFs and stock assessments) provided to enable better compliance with international treaties by March 2028 [**IWTCF-B24**]. 0.2 Following updated training post CoP19, expert trainers (12 men, 8 women) deliver shark product identification workshops to more than 200 staff (improving on baseline of M:F 62%:38% participation where possible) across trade, law enforcement and fisheries agencies and more than 30 fishers catching sharks, and	0.1 Organogram of governance; draft species stock assessments and NDFs; attendance and contributions (e.g., presentations, interventions) at international meetings such as IOTC. 0.2 Pre/post ID training scores; DNA framework proposal	Indonesian governmental regulatory agencies actively engage in governance review, data mapping and NDF/stock assessment training. *Project engagement with the Directorate General for Capture Fisheries established through bycatch workshop (April 2022) and with enforcement agencies including customs who were trained in IWT057.* Expert shark trade trainers continue to actively engage in training and go on to train others. *To date the training team have been very committed to their roles as national expert trainers (training over 200 staff since the start of IWT057) and continue to provide training to colleagues across Indonesia.* Optimisation

	novel DNA based monitoring technologies have been operationalised and a sampling framework proposed to government by March 2028 [**IWTCF-D01**]. 0.3 At least 30% increase in private sector understanding of legal trade requirements following stakeholder engagement, incentivising compliance as demonstrated by a 10% increase in the number of registered traders, and with >50% of those complying with allocated quotas compared with Y1 baseline by March 2028 [**IWTCF-D06**]. 0.4 By the end of the project, illegally traded shark products comprise less than 5% of all inspected shark consignments in local and international export ports **[IWTCF-B07].** 0.5 Results from surveys of a least 300 households across four communities that depend on CITES-listed sharks provide estimates of domestic consumption verses illegal trade by March 2027 (aim for 50:50 M:F participation across all community surveys) **[IWTCF-B08].**	0.3 Analysed results of stakeholder survey; annual trade monitoring report (number of registered traders and quota compliance) 0.4 Annual report on shark trade and traffic by technical units. 0.5 Completed PhD studentship ("PhD Livelihoods") and associated peer-reviewed publication	and portability of shark-dust approach is achievable within project milestones and government is receptive to its implementation. *Molecular approaches to species ID have been identified as a priority throughout IWT057 so we expect uptake to be high; a workflow for optimising the shark-dust method has already been planned.* Stakeholders are willing to engage in the project and are receptive to improving their compliance with trade monitoring systems. *Rekam has supported MMAF in developing communication media to promote sustainable fisheries and trade. Rekam currently engages with fishers and trader in training and socialization of trade regulation.* Law enforcement and technical unit staff regularly conduct trade monitoring at exit ports to enable detection and reporting of illegal trade. *Technical units currently check all applications for trade (by issuing letter of recommendation) and provide intelligence to law enforcement (DG Surveillance) staff to target checks.*

	0.6 Locally designed conservation actions for reducing bycatch of CITES-listed wedgefish in two communities reduces the number of wedgefish landed with a 100% increase in the number released by the end of the project (baseline: 20 releases per month) **[IWTCF-A15]**	0.6 Monthly data sheets of live releases submitted; videos	PhD student successfully recruited and completes the study scholarship. *Students will be recruited through a rigorous scheme to ensure we attract the best candidates and once recruited they will receive academic supervision from UK and Indonesian partners.* Fishing communities are willing to engage in the project activities. *These activities build on existing Rekam work programmes and will add value to these by engaging more community members and additional fishing ports.*
Outputs: **1.** Increased institutional co-ordination across more than 9 government and research agencies involved in the management of Indonesia's shark fisheries and trade, facilitates greater compliance with international treaties (e.g., CITES, RFMOs - IOTC) by March 2028.	1.1 Practical recommendations for improving the governance of Indonesia's shark fisheries and trade management system have been identified by >40 representatives from government and research agencies by April 2025. 1.2 Recommendations (identified in 1.1) have been actioned through bi-annual cross-government technical advisory group meetings during Y's 2, 3, and 4.	1.1 Attendee lists from events; organogram of management framework; brief report of recommendations. 1.2 Meeting attendee list, minutes; photographs. 1.3 Attendee list; training certificates; draft NDF.	Effective engagement for sufficient understanding of the current national framework for shark fisheries and trade management. *Building on effective engagement with the Directorate General for Capture Fisheries, Directorate General for Marine Spatial Planning, Directorate General for enforcement, quarantine agencies and NGOs established during IWT057.* Co-ordination and effective communication between relevant

	1.3 More than 20 (improving on baseline participation of M:F 62:38 participation where possible) government staff from CITES Management and Scientific Authorities have attended a 4-day workshop on non-detriment findings (NDFs), by June 2026 [**IWTCF-D03].** 1.4 At least 30 cross-government staff attend a 4-day technical workshop on data-limited species stock assessment methods by June 2026 [**IWTCF-D03**]. **1.5** By March 2028, at least 3 government staff trained in 1.3 and 1.4 are providing effective technical advice to the Indonesian delegation at CITES and RMFO (IOTC and/or WCPFC) meetings on assessments for species of interest (e.g., IOTC silky and thresher shark in 2026) **[IWTCF- B01, D10].**	1.4 Attendee list; training certificates; draft species assessment. 1.5 Attendance records at CITES and IOTC meetings; record of technical presentations at IOTC Scientific Committee meetings; completed PhD studentship (PhD Assessment, PhD Governance) and associated peer-reviewed publications.	ministries. The National report developed states that to fulfil the international conventions (CITES, RFMO). MMAF currently consults and coordinates with research centre to support the scientific data (Now BRIN), and with a fishery's national expert panel from various universities. Effective engagement in training by Indonesia's Management, Scientific Authority, and other supporting organisations, as well as the selection of appropriate technical staff to receive the technical stock assessment and NDF training. *Training in data limited stock assessment methods and development of NDFs identified as a priority by MMAF. Awareness of individuals who are currently developing assessments methods who are well placed to receive additional training.* The trained staff invite in technical advice and assessment methods provides adequate support for government staff to effectively contribute at international meetings*. PhD focused on stock assessment development provides in-depth*

			training over 3 years in addition to short training workshops. Cefas able to provide support prior, during and post IOTC meetings as attendees.
2. Institutional capacity in data collection and monitoring is strengthened by scaling existing initiatives (IWT057), promoting accurate species identification among >100 management and law enforcement staff (by March 2026), and through the application of novel trade monitoring technologies (by March 2028).	2.1 Twenty expert trainers (12 men, 8 women) have received updated CITES species identification training and a 1-day training course on DNA sampling [**IWTCF-D26**] by May 2025. 2.2 Expert trainers have delivered visual ID workshops to >120 law enforcement, port authority, and technical implementing unit staff, > 75 fisheries observers, and > 30 shark skippers and crew, by September 2026 (improving on baseline of M:F 62%:38% participation where possible but considering male-dominated roles e.g., fishing) **[IWTCF-D01]**. 2.3 A portable DNA approach for species identification of products is developed and operationalised (based on outputs from IWT057) by January 2028, and a proposal to enable its wider implementation has been co-designed with trade staff	2.1 Attendee lists and workshop photographs; pre/post-test results; brief report from trainer. 2.2 Attendee lists and workshop photographs; training course pre/post-test results. 2.3 Completed PhD studentship (PhD Tools) and associated peer-reviewed publications, final sampling framework document and SOPs.	MMAFs shark expert trainers continue to actively engage in training. *To date the training team have been very committed to their roles as national expert trainers and continue to provide training to colleagues across Indonesia.* Fisheries and trade management staff actively engage in training. *Need to strengthen ID training for broader government agencies and ministries was flagged during a bycatch workshop (April 2022).* Optimisation and portability of shark-dust approach is achievable within project milestones and government is receptive to its implementation. *Molecular approaches to species ID have been identified as a priority throughout IWT057 so we expect uptake to be high; a workflow for optimising the shark-dust method has already been planned.*

	and submitted to MMAF by March 2028. **[IWTCF-B05, D26].**		
3. Engagement with the private sector drives increased compliance of traders operating within legal frameworks and enables estimates of the illegal component of trade to be established by March 2028.	3.1 At least 30 % of fishers, processors, sellers, traders, and exporters surveyed in January 2028 (post engagement) are more informed about trade regulation and requirements compared to a Y1 baseline **[IWTCF-D03]**. 3.2 Guidance, coordination, monitoring, and evaluation of trade management systems is delivered through bi-annual Stakeholder Steering group (SSG) workshops with >20 staff from three government agencies, and >25 key private sector stakeholders. 3.3 Compliance of the private sector with trade management systems is greater at the end of the project as demonstrated by a 10% increase in the number of registered traders, and with >50% of those complying with allocated quotas compared with Y1 baseline (baseline: 385 private sector businesses registered in 2023: 83 exporters and 302 domestic traders) by March 2028 **[IWTCF-B07].**	3.1 Results of pre and post project stakeholder surveys 3.2 Meeting attendee list and minutes; photographs. 3.3 Report of year one baseline; annual trade monitoring report (number of registered traders and quota compliance). 3.4 Attendee lists and workshop photographs; training course pre/post-test results. 3.5 Quota compliance report including number of trade violations.	Stakeholders and government are willing to engage in the project, are prepared to share local knowledge, resources, and opinions on the current shark trade chain, and are receptive to awareness raising and improving their compliance with trade monitoring systems. Increasing awareness of regulations results in increased compliance. Increased feedback from stakeholders allows government to refine systems. *Many stakeholders have already engaged to support the government in developing monitoring systems from fish landing sites to exit ports through the sharing of lessons learnt.* Unregistered businesses are willing to register within legal trade management framework. *To date there has been high levels of willingness to register with the system with the number the number registered more than doubling during the last year.*

	3.4 By September 2027, at least 50 law enforcement staff and customs officials have received training in monitoring systems of legal trade to support the identification of intentional criminal activity at borders (improving on baseline of M:F 89%:11% participation where possible) **[IWTCF-B01].** 3.5 By March 2028, the quantity of illegal trades (by registered traders) including both local and export activities that law enforcement agencies have managed to detect and prevent decreases by 40%. (Baseline: average numbers of violations/illegal trade comprise 5% of the total registered shark trade) **[IWTCF-D03].**		Law enforcement and customs staff actively engage in training. *We had good engagement from these staff in training during IWT057.* Law enforcement and customs staff actively and regularly monitor and check in cross borders (exit port). *Technical units currently check all applications for trade (by issuing letter of recommendation) and provide intelligence to law enforcement (DG Surveillance) staff to target checks.*
4. Local fisheries management interventions including bycatch mitigation schemes in two communities, and engagement with > 300 households across four shark fishing communities, provides evidence of the scale of	4.1 The data journey from capture to export or domestic consumption has been mapped by March 2025, and gaps in data, monitoring and training have been documented. 4.2 Four technical implementing units (fish landing ports) have standardised collection of shark landings data which meets requirements specified in	4.1 Scoping report of data journey. 4.2 Database and supporting guidance documents. 4.3 Education video aimed at fishers; supporting educational materials (e.g., leaflets); event attendee	Indonesian governmental regulatory agencies actively engage in data mapping. *Project engagement with the Directorate General for Capture Fisheries established through bycatch workshop (April 2022) and with enforcement agencies including customs who were trained in IWT057.*

community dependence for food security while supporting on-the-ground protection of CITES-listed sharks by March 2028.	Directorate General Decree No. 9/2021, including species identification, length, fishing gear, and fishing ground. 4.3 Community engagement events with >100 fishers and traders from 4 shark fishing communities (West Nusa Tenggara [50 households], Jakarta [50 households], Central Java [100 households], East Java [100 households]) on the legalities of catching, processing, and selling shark products domestically and internationally have been delivered by March 2026 **[IWTCF-C05].** 4.4 Interviews with fishers, processors, and traders from more than 100 households across West Nusa Tenggara, Jakarta, Central Java, and East Java have been conducted and analysed by PhD Livelihoods to understand community dependence on legal trade in CITES-listed sharks, both for food security (domestic consumption) and international trade by March 2028 (aim for 50:50 M:F participation across all community surveys) **[IWTCF- B08].**	lists and minutes; photographs. 4.4 Transcript of interviews; photographs; PhD thesis and peer reviewed publications 4.5 Workshop attendee lists and minutes; photographs; videos of live releases; data record of live releases. 4.6 Transcript of interviews; photographs; peer reviewed publication draft 4.7 Analysis of pre/post skipper data collection; handling and release guides; training records and photographs.	Technical implementing units continue to conduct shark landing data collection and actively engage with Directorate of Conservation in monitoring and evaluation process on shark data landing program. *Technical unit staff are obligated to conduct catch surveys within their region.* Communities are willing to engage and take part in the socialisation campaign and take part in bycatch reduction schemes. *We will build on Rekam's ongoing initiatives with shark fishing communities who already engage in a programmes to promote sustainable shark fishing practices.* National candidates successfully enrol and complete PhD studentships. *We developed a successful model for this in IWT057 and are advised that there is a national aspiration to increase the number of PhD qualifications to support marine management.* New private tuna fishing companies are willing to engage in a survey and consider bycatch reduction schemes.

	4.5 More than 100 fishers (skippers and crew) from 2 fishing ports in Central Java province (Rembang and Pati), participate in a bycatch reduction for CITES-listed wedgefish, increasing the number of live releases by 100% by the end of the project (currently 20 releases per month) **[IWTCF-C01]** 4.6 Perception study conducted with 15 private tuna fishing companies identified in (Central Java, Jakarta, and Bali) to understand the willingness to reduce shark bycatch by September 2026. 4.7 With at least 3 tuna fishing companies identified in 4.6, co-design fishery management measures to improve shark bycatch data collection and provide training to fishers on handling and release to maximise the survival of released sharks by March 2028.		

Activities

Output 1. Increased institutional co-ordination across more than nine government and research agencies involved in the management of Indonesia's shark fisheries and trade, facilitates greater compliance with international treaties (e.g., CITES, RFMOs - IOTC) by March 2028.

1.1. Recruit four PhD students (3 x IPB, 1 x LJMU).

1.2. Design/ conduct a short quantitative survey of women engaged in IWT057 to understand potential barriers to inclusion of women in project activities.
1.3. Conduct national and regional workshops to map the management of sharks from capture to consumption or export.
1.4. Produce brief report collating outputs from 1.3, including organograms and recommendations for improvement actions.
1.5. Draft ToR, establish membership and hold bi-annual cross-government meetings to action recommendations outlined in 1.4.
1.6. Deliver technical workshop on data-limited stock assessment methods to government, academia, and NGOs.
1.7. Deliver technical workshop on the development of CITES NDFs for sharks and rays.
1.8. Online knowledge-exchange meetings between Cefas and BRIN scientists who attend and contribute to RFMO meetings (IOTC SC and WPEB).

Output 2. Institutional capacity in data collection and monitoring is strengthened by scaling existing initiatives (IWT057), promoting accurate species identification among >100 management and law enforcement staff (by March 2026), and through the application of novel trade monitoring technologies (by March 2028).

2.1 Update MMAF training modules to include new CITES listed species (CoP19, 2022).
2.2 Review, translate, produce, and distribute updated ID guides including new CITES-listed species.
2.3 Design a one-day training workshop titled 'A standardised method to collect DNA samples'.
2.4 Run a three-day visual ID (updated in 2.1) workshop for expert trainers, and report on pre/post training test results.
2.5 Expert trainers deliver visual species identification workshops to fisheries (observers, enumerators) and trade (law enforcement, technical unit) staff.
2.6 "PhD Tools" develops lab-in-the-field method to support warehouse inspections and conduct national assessment of shark products in trade.
2.7 Develop a Standard Operating Procedure for using molecular-based monitoring at local and exit ports, and present to MMAF in a policy brief.

Output 3. Engagement with the private sector drives increased compliance of traders operating within the legal framework and enables estimates of the illegal component of trade to be established by March 2028.

3.1 "PhD Livelihoods" design and conduct pre/post project impact assessment of fishers, processors, sellers, traders, and exporters on knowledge of legal trade frameworks.
3.2 Identify key stakeholders for involvement in the project's stakeholder steering group (SSG), agree schedule/timings of bi-annual workshops, and develop SSG's Terms of Reference.
3.3 Host bi-annual SSG workshops to communicate the implementation of monitoring and evaluation of trade management systems.
3.4 Design, conduct and report annual survey of private sector compliance with allocated quotas.
3.5 Design and run training workshop for law enforcement staff and customs officials in legal trade monitoring systems and visual identification.
3.6 Design, conduct and report annual technical unit trade monitoring inspections, detected violations and cases of illegal trade.

Output 4. Local fisheries management initiatives including bycatch mitigation schemes in two communities, and engagement with > 300 households across four shark fishing, provides evidence of the scale of community dependence for food security while supporting on-the-ground protection of CITES-listed sharks by March 2028.

4.1 Information gathered during workshops (1.2) is used to produce a map of data flow from capture to consumption/export which is included a summary report (1.3).
4.2 Collect and report (1.3) information on standardised data recording by technical units and the flow of data to the directorate and BRIN.
4.3 With BRIN, provide recommendations for improving the quality of data and how it can be made available for formulating NDFs, stock assessments and quotas.
4.4 Develop educational materials (videos, leaflets, posters) for fishers and wider village communities to raise awareness of the ecological importance and protection of sharks.
4.5 Deliver fisher awareness raising events in four important fishing communities throughout Indonesia.
4.6 "PhD Livelihoods" design and conducts interviews across four sites (shark catchers, processers, and sellers) to understand community (gender-specific) dependence on sharks for food security.
4.7 Invite and recruit fishers from local communities to participate in a programme of biological data collection and live release of wedgefish.
4.8 Deliver training workshops to participating fishers in communities in Northen Java.
4.9 Collate fisher self-reported data on live releases and biological data collection and summarise in a brief report.

4.10 Perception study on tuna fishers' awareness of RFMO requirements and willingness to reduce bycatch is designed, conducted, and prepared for peer reviewed publication.
4.11 Best practise shark handling and release guides are designed and produced.
4.12 Training provided to participating fishers in improving data collection and improved shark handling and release based on results from 4.10.
4.13 Design, conduct and report a post engagement and training impact survey of tuna fishing companies participating in 4.9.