

Applicant: **Ilman, Muhammad**
Organisation: **TNC**
Funding Sought: **£599,365.00**

DIR28S2\1005

Nature Climate Solutions to protect mangrove biodiversity and improve livelihoods

Unsustainable aquaculture practices support 30% of the population but threaten 54,000 ha of mangrove ecosystems in Berau Regency, East Kalimantan. Through community engagement, capacity building and establishment of land-use plans, the project aims to protect 15,000 ha of mangroves, and provide a novel community-based model to increase shrimp productivity while restoring 80% of shrimp ponds back to mangroves in 5,000 ha. The expected outcomes are increased biodiversity and governance of vulnerable mangroves, and improved livelihoods in 3 villages.

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Section 1 - Contact Details

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Section 2 - Title, Ecosystems, Approaches & Summary

Q3. Title:

Nature Climate Solutions to protect mangrove biodiversity and improve livelihoods

What was your Stage 1 reference number? e.g. DIR28S1\1123

DIR28S1\1455

Q4. Key Ecosystems, Approaches and Threats

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

Biome 1

Intensive land-use systems (agric., plantations and urban)

Biome 2

Palustrine wetlands (flooded forests, wetlands, marshes, floodplains)

Biome 3

Brackish tidal systems

Conservation Action 1

Land/water protection (area/resource/habitat)

Conservation Action 2

Land/water management (area, invasive control, restoration)

Conservation Action 3

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

Threat 1

Agriculture & aquaculture (incl. plantations)

Threat 2

Natural system modifications (fires, dams)

Threat 3

Pollution (domestic, commercial, agricultural)

Q5. Summary

Please provide a brief summary of your project, its aims, and the key activities you plan on undertaking. Please note that if you are successful, this wording may be used by Defra in communications e.g. as a short description of the project on the website.

Please write this summary for a non-technical audience.

Unsustainable aquaculture practices support 30% of the population but threaten 54,000 ha of mangrove ecosystems in Berau Regency, East Kalimantan. Through community engagement, capacity building and establishment of land-use plans, the project aims to protect 15,000 ha of mangroves, and provide a novel community-based model to increase shrimp productivity while restoring 80% of shrimp ponds back to mangroves in 5,000 ha. The expected outcomes are increased biodiversity and governance of vulnerable mangroves, and improved livelihoods in 3 villages.

Section 3 - Title, Dates & Budget Summary

Q6. Country(ies)

Which eligible host country(ies) will your project be working in? Where there are more than 4 countries that your project will be working in, please add more boxes using the selection option below.

Country 1 Indonesia

Country 2 No Response

Country 3 No Response

Country 4 No Response

Do you require more fields?

No

Q7. Project dates

Start date:

01 June 2022

End date:

31 March 2025

Duration (e.g. 2 years, 3 months):

2 years, 10 months

Q8. Budget summary

Year:	2022/23	2023/24	2024/25	Total request
Amount:	£185,239.00	£235,597.00	£178,529.00	£ 599,365.00

Q9. Proportion of Darwin Initiative budget expected to be expended in eligible countries: %



Q10a. Do you have matched funding arrangements?

Yes

What matched funding arrangements are proposed?

Proposed matched funding from YKAN for this project will be [REDACTED] (Anonymous Foundation: [REDACTED] (secured), Bezos Fund: [REDACTED] (unconfirmed)). The matched funding supports YKAN's blue carbon natural climate solution program in Berau, East Kalimantan covering the operation of four SECURE shrimp pond models. The SECURE program aims to provide ten SECURE shrimp model to provide easy access for community living in three villages to learn about the SECURE system. In addition, the existing program also needs additional resources to develop a comprehensive spatial/management plan for the intact mangroves and aquaculture areas which will help facilitate long term investment for the protection of the ecosystem, i.e. from Village Government Annual Budget (Dana Desa) and carbon finance. The Darwin Initiative funding is aimed at fulfilling the need of 10 SECURE ponds by adding six new shrimp model ponds and develop management plan for the mangroves and aquaculture areas.

Q10b. Total confirmed & unconfirmed matched funding (£)



Q10c. If you have a significant amount of unconfirmed matched funding, please clarify how you fund the project if you don't manage to secure this?

We are waiting for a decision at TNC global office, expected to be in February 2022, on the allocation of the donation from the Bezos Fund to support our SECURE project in Berau which could be used as matched funding in the third project year.

Section 4 - Problem statement

Q11. Problem the project is trying to address

Please describe the problem your project is trying to address in terms of biodiversity and its relationship with poverty. For example, what are the drivers of loss of biodiversity that the project will attempt to address? Why are they relevant, for whom? How did you identify these problems?

Please cite the evidence you are using to support your assessment of the problem (references can be listed in your additional attached PDF document which can be uploaded at the bottom of the methodology page).

Indonesia has the world's largest mangrove area, boasting the highest richness of mangrove species that provide resilience from natural disasters, tropical storms and sea level rises. Indonesia's mangroves are sanctuaries for marine fish, crabs, shrimp and molluscs that directly support the livelihoods of coastal communities while also sustaining a diversity of terrestrial wildlife. While mangroves are the most effective ecosystem at storing carbon, they are also one of the most threatened tropical ecosystems with an alarming 20% destroyed, less than 7% protected, and more than 40% of mangrove terrestrial species at risk of extinction.

It is estimated that the majority (83%) of mangrove loss in Indonesia is due to aquaculture expansion. In Berau, over 5% of the population live in extreme poverty relying heavily on shrimp aquaculture for their subsistence with few other alternative livelihoods available to them. Current practices of converting mangroves into shrimp ponds to increase productivity, the use of pesticides, and lethal wildlife control, are unsustainable and have led to a high rate of mangrove degradation and decreased biodiversity. The loss of mangroves within shrimp farming areas counterproductively reduces the ability of the ecosystem to support shrimp production by as much as 90% compared to shrimp ponds within a mosaic of intact mangroves. These low productivity ponds have driven communities to convert more mangroves to shrimp ponds, creating a vicious cycle of mangrove clearing and reduced shrimp production.

For decades, efforts by the Indonesian Government, private sector, and NGO's to reverse the loss of mangroves have been unsuccessful partly because the focus was on large scale restoration projects that paid little attention to the protection of existing intact mangroves. These previous restoration efforts did not address the unsustainable low-productivity aquaculture expansion which is the main underlying factor of mangrove loss. As a result, Indonesia is still experiencing a net annual loss of mangroves of approximately 12,800 ha.

Mangrove ecosystems of Berau are home to important IUCN red list endangered species such as Proboscis monkeys, Irrawaddy dolphins, Lesser adjutant storks, Otters, and Dugongs, including some who are reliant on mangroves for their survival. For example, mangrove and riverine forests are the main habitats of proboscis monkeys with recent studies suggesting that some populations may be obtaining their food resources from surrounding terrestrial non-mangrove forests, but, no alternative suitable non-mangrove forests exist in the coastal project area. With habitat destruction as the main threat of extinction for this species, and no alternative adjacent non-mangrove forest available to them, proboscis monkeys are dependent on the mangroves in this region for their food, shelter and survival.

To combat mangrove destruction in Berau, there must be economic and social incentives for local communities to conserve rather than to clear and convert mangrove forests to shrimp ponds. There is a need for community engagement and awareness, particularly with women who contribute significantly to shrimp aquaculture production, to empower them to protect and restore mangroves and to develop alternative sustainable livelihoods.

Section 5 - Darwin Objectives and Conventions

Q12. Biodiversity Conventions, Treaties and Agreements

Q12a. Your project must support the commitments of one or more of the agreements listed below.

Please indicate which agreement(s) will be supported and describe which objectives your project will address.

- Convention on Biological Diversity (CBD)
- Convention on the Conservation of Migratory Species of Wild Animals (CMS)
- Ramsar Convention on Wetlands (Ramsar)
- United Nations Framework Convention on Climate Change (UNFCCC)
- Global Goals for Sustainable Development (SDGs)

Q12b. National and International Policy Alignment

Please detail how your project will contribute to national policy (including NBSAPs, NDCs, NAP etc.) and in turn international biodiversity and development conventions, treaties and agreements that the country is a signatory of.

National Policy Alignment

By protecting 15,000 ha of mangroves and restoring a further 4,000 ha of mangroves (80% of 5,000 ha of shrimp ponds), this project will contribute to the Government of Indonesia's ambitious target of rehabilitating 600,000 hectares of mangroves by 2024 through its national mangrove rehabilitation program. The resulting improvement of mangrove habitat will advance Indonesia's Biodiversity Strategy and Action Plan to conserve biodiversity.

Indonesia's commitment to the Convention on Biological Diversity (CBD) is implemented through the Indonesian Biodiversity Strategy and Action Plan (IBSAP). YKAN holds a Cooperation Agreement with the Directorate General of Natural Resources and Ecosystem Conservation (also the national focal point of the CBD Convention) to implement the IBSAP. With Berau Regency listed as one of the target sites under the agreement, this project contributes to IBSAP Targets 2, 7, 14 and 21 by restoring degraded mangroves, increasing community income through sustainable biodiversity and aquaculture management and contribute to integrated biodiversity mapping and information.

By employing SIGAP community-based planning to break the cycle of mangrove conversion to shrimp ponds resulting in a reduction of ~15,000 tonnes of CO₂e emission, this project will contribute to Indonesia's NDC's target to reduce 497 MTCO₂e by 2030 (Mitigation), and to develop community capacity and participation in local planning processes (Adaptation). This work also supports Indonesian Low Carbon Development strategies 2 and 5 by protecting and restoring mangrove ecosystems aiding in the deforestation rate, and by providing carbon stock analysis of rehabilitated mangroves.

Contributions to International Conventions, Treaties and Agreements

The project will advance goals A and B of the Post-2020 Global Biodiversity Framework by conserving and equitably managing mangroves and contributing to mitigations and adaptations by managing aquaculture areas through ecosystem-based approaches. By contributing to Indonesia's NDC on land-based ecosystem approaches, the UNFCCC Paris Agreement is also supported. Improvement in mangrove habitat links to the protection of migratory water birds under the Convention of the Conservation of Migratory Species of Wild Animals.

The project supports Ramsar targets 3, 9, 12 and 13 by applying good practices and strengthened local management plans for wetlands, restoring degraded wetlands, and promoting sustainable aquaculture.

Sustainable Development Goals

The project supports SDGs 1, 5, 13, 14, and 15 related to poverty reduction, gender equity, climate action, sustainable use of marine resources, and biodiversity respectively, while linking to SDG 3 on the promotion of well-being for all, and SDG 2 on food security and hunger.

Specifically, the project directly tackles SDG14 targets through mangrove restoration and improved aquaculture practices (Target 14.2), assisting communities to sustainably manage and conserve coastal areas (Target 14.5), and increases economic benefits through capacity building of environmentally friendly aquaculture, mangrove ecotourism and non-timber household industries (Target 14.7).

SDG Targets 1.4, 1.5 and 5a are supported by promoting equitable businesses and integrating women's involvement in mangrove management decisions. By providing shoreline protection and increased carbon stores, promoting sustainable mangrove management decreasing threats to species, and integrating biodiversity values and poverty reduction strategies into village development SGD Targets 13, 15.2, 15.5 and 15.9 are also supported.

Section 6 - Method, Change Expected, Gender & Exit Strategy

Q13. 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 analysed historical and existing initiatives and are building on or taking work already done into account

in project design. Please cite evidence where appropriate.

- The rationale for carrying out this work and a justification of your proposed methodology.
- How you will undertake the work (materials and methods).
- How you will manage the work (roles and responsibilities, project management tools, etc.).

The project will use 3 integrated approaches to deliver the project outputs in the 3 target villages.

1. YKAN's SIGAP (Aksi Inspiratif Warga untuk Perubahan or Inspiring Community Actions for Change) is a seven-phase, community-based planning, and empowerment approach to create and implement development plans to improve village governance and manage their natural resources. Celebrated as the 'gold standard' and adopted by the East Kalimantan Provincial Government and the Berau District Government in 2010, SIGAP has been successfully implemented in 100 villages in Berau District as the government-led program. The seven SIGAP phases include: disclosure, define, discover, dream, design, delivery, and drive (7D's).

YKAN's Field Coordinator will use the '7D's' to facilitate community members through a participatory approach to adopt an ecosystem approach to aquaculture (EAA), to restore the local mangrove ecosystems, to conserve biodiversity, and to generate income based on sustainable aquaculture and livelihoods as follows:

Disclosure: Consultations are held with stakeholders of the 3 target villages to introduce concepts of the project's outcome and outputs, and to build awareness.

Define: Each village is scoped for the status of the community's economic activity, aquaculture practices, condition of shrimp ponds (their general uses and trends). Household interviews by YKAN facilitators using a structured questionnaire after seeking FPIC will be conducted to illicit a higher response rate.

Discover: Each village's strengths and 'assets' (human (knowledge, capacities and experience), natural, social and physical resources) are identified with community discussions to utilize these strengths for village and mangrove ecosystem improvement.

Dream: A long-term vision and land use plan (10–15-year timeline) is produced together with stakeholders.

Design: Village workplans are formulated by engaging the community in decision-making for the protection of 15,000 ha of intact mangroves and EAA improvement plan for 5,000 ha shrimp ponds (including a 100 ha Shrimp Carbon model (SECURE) demonstration site).

Delivery: Village stakeholder agreements are developed and the design phase for the project's activities are implemented.

Drive: Evaluations (including final household interviews) of the prior six steps, including challenges, successes and lessons learned, are undertaken to scale up to other locations within Kalimantan, Indonesia and globally.

2. Shrimp-Carbon Aquaculture (SECURE) approach developed by YKANn Semarang City and Berau Regency is a method to capitalize mangrove restoration, improve biodiversity and sequester carbon, while increasing shrimp farm productivities. Unlike the traditional method of combining mangrove management and aquaculture (known as sylvofishery) that limits farm productivities due to space competition between shrimp and mangroves in the shared pond, SECURE splits an active shrimp pond into two or more ponds with approximately eighty percent of the original pond allocated to mangrove restoration and the remaining 20 percent maintained as a shrimp pond for aquaculture. Despite the smaller ponds, shrimp yield is increased compared to the overall original production by employing improved aquaculture practices including virus free shrimp fry, water inlet filtration reducing predation risk, soil quality improvement from water exchange and liming, and improved post-harvest handling. With this approach, mangroves regenerate naturally (through hydrological restoration or hybrid engineering) resulting in improved habitat for wildlife, increased carbon sequestration mitigating climate change impacts, while also improving mangrove-based livelihoods. In this project, we will measure mangrove carbon pool using the widely adopted Kauffman and Donato (2012) protocol.

3. Ecological Spatial Prioritisation, Experimental Design and Monitoring to evaluate and monitor biodiversity will be carried out jointly by Universitas Mulawarman (UnMul) and University of Leeds project partners.

Spatial prioritisation for the different types of land-use management will be collated from spatial data layers of habitat types, mangrove and pond extent and village land-use. Data from environmental DNA (eDNA) water and sediment samples, water quality samples and key biodiversity indicator species observations will be collected from four pond treatments (normal, intensive, remediation, and old remediation use), and four mangrove treatments (old growth, newly restored, 1- year restored, and 2-year restored) five times a year (years 1-3). Eukaryote taxonomic diversity will be quantified from eDNA extractions with the use of NGS amplicon sequencing of phylogenetically informative marker genes, and community composition and species richness determined from amplicon sequence variant (ASV) parsing, and taxonomic assignment using custom reference databases. The temperature, pH, salinity, density, and concentration of dissolved oxygen (DO) of the water will be conducted by YKAN with the use of a water multi-meter and analysed by the UnMul laboratory team. Annual visual census methods will be conducted to determine the species richness of mangrove trees, mangrove-associated aquatic species, birds, and key threatened species (e.g. Proboscis monkeys-EN, Chinese egrets-VU, Lesser adjutant stork-VU).

Q14. Capability and Capacity

How will you support the strengthening of capability and capacity in the project countries at organisational or individual levels, please provide details of what form this will take and the post-project value to the country.

The project will facilitate local application of participatory planning and action approaches developed from previous experiences of the project partners in mangrove protection and restoration elsewhere, including community-led mangrove protection, improved aquaculture for privately owned ponds, and improved mangrove-based livelihoods. Therefore, the project delivers opportunities for participating community organisations, individuals and government staff to learn from others, and enhance collaboration among stakeholders. More directly, the project will provide structured capacity building for government staff and community members regarding SIGAP, community forest concessions, aquaculture improvement, and carbon financing. The project will train aquaculture workers and establish a local mangrove field school, which will include sites that demonstrate the practical application of improved aquaculture and mangrove restoration. The project will also provide opportunities for village business unit staff to learn from other successful village owned enterprises in other Provinces.

Through SIGAP, we will identify additional needs and opportunities for capacity building related to governance arrangements for mangroves, transitioning to improved aquaculture and local livelihoods, handling gender and social equity issues, managing small grants, micro-enterprise development, market and value chain analysis, and post-harvest processing. It is envisaged that additional capacity building could include establishment of community enterprises to enable access to different financial sources, from state budget (i.e., village fund, Ministry of Environment and Forestry (MoEF) DG social forests fund), non-state budget (i.e., BPDH, biodiversity offsets, PES such as Plan Vivo/ Verra certified carbon credits), and also small-business revenues (i.e., NTFP, PMSD). The project may train local community members in eco-tourism development, including product development, hospitality, and guide training.

The application of the three participatory approaches in this mangrove area will be of immense relevance and utility to Berau, and other mangrove-rich provinces because the experience and capacity established can be leveraged to support further geographical and institutional expansion across Indonesia.

Q15. Gender equality

All applicants must consider whether and how their project will contribute to reducing inequality between persons of different gender. Explain how your understanding of gender equality within the context your project, and how is it reflected in your plans.

Indonesia is the world's second largest producer of shrimp, with production dominated by small-scale operations ranging from two to tens of hectares of ponds. Women are particularly active in the post-harvest activities including shrimp fry and feed collection, and storage and processing, yet typically have less access to training than men. Despite women's significant contribution to shrimp farming, Indonesian gender norms view women's primary role as domestic caregivers, so are typically only hired as casual workers creating barriers to their engagement to decision making in this industry.

The project will involve participation of both men and women and will empower women by engaging at least 50% women in community consultations, capacity building activities, and as part of the project team. A gender-sensitive participatory approach, applying FPIC, gender analysis and a gender action plan, will be implemented throughout the project cycle. Working closely with our gender specialist we will integrate gender considerations by addressing barriers to women's participation by ensuring the timing, location and format of activities are tailored appropriately. For example, alternative livelihood training and capacity development will explicitly target women. Where necessary, separate meetings will be held for women and men; ensuring information is accessible to those with little or no formal education and low literacy; providing childcare; making sure meetings are in safe spaces for women and other vulnerable groups and at times when they are not engaged by other demands.

Tracking gender-related changes over time (e.g., through training attendance and knowledge surveys) will be used to ensure the monitoring and evaluation of the project is gender responsive. Both qualitative and quantitative disaggregated data collection methods will benefit any necessary adjustments to ensure gender equity avoiding any negative impacts and elevates the voices, choices and actions of women and girls involved in this project.

Q16. Awareness and understanding

How will you raise awareness and understanding of biodiversity-poverty issues in your stakeholders, including who are your stakeholders, what approaches/formats/products will you use, how you will ensure open and free access to

all data, and how will you know that the messages are understood?

Key stakeholders include Regency and Village Government, and the community who directly manages the mangroves and/or own aquaculture ponds. While the government and community appear to have a good general understanding about the links between mangrove biodiversity and livelihoods, there is a need to:

1. Assess the extent to which specific stakeholder types are aware of the threats to the size and health of mangroves and to the productivity of aquaculture ponds; the changes that need to occur to address these threats and losses in productivity, and the expected results from making such changes. This will establish a more precise baseline measure of stakeholders' awareness of the problems, solutions and benefits of addressing mangrove protection, changing aquaculture practices, and developing livelihood-based incentives for mangrove conservation;
2. Develop and implement a communications strategy that addresses measured gaps in stakeholder awareness; promotes community participation in mangrove protection and livelihood improvement; and encourages curiosity in, and uptake of, improved aquaculture practices among aquaculture pond owners/ operators.
3. Provide mechanisms to ensure relevant events, decisions, action plans, findings, progress and data are appropriately shared among stakeholders.

A simple survey will be designed and deployed to capture a baseline measure of stakeholder awareness. This survey will be repeated to measure the impact of the project's communications strategy and transparency mechanisms.

The communications strategy will prescribe the presentation of information about mangrove protection and values, aquaculture practices and their impacts, and mangrove-based livelihood improvements at regular community meetings, village workshops, and training events. Information and educational materials will also be displayed in local villages on public and purpose-built notice boards.

Similar and tailored information for government staff will be delivered through training workshops on policy and practice issues for mangrove protection and restoration, improved aquaculture and poverty reduction through mangrove-based livelihood development.

Q17. Change expected

Detail the expected changes to both biodiversity and poverty reduction, and links between them, this work will deliver. You should identify what will change and who will benefit a) in the short-term (i.e. during the life of the project) and b) in the long-term (after the project has ended).

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.

The 20,000 ha of mangroves and shrimp pond will be managed with two land uses namely: (1) establishing the community forest to protect the intact mangroves covering 15,000 ha and (2) the Ecosystem Approach to Aquaculture systems covering 5,000 ha where the community will restore 80% of the mangrove, and 20% area will be set aside for aquaculture which will be eco-certified according to a global standard.

The project will return biodiversity to the restored mangroves, demonstrated by higher flora and fauna diversity. Mangrove restoration in the shrimp ponds combined with improvement of aquaculture practices will provide a larger habitat for wildlife and reduce the threats from poisonous aquaculture substance such as pesticides and fertilizers.

Improvement of the environmental quality combined with better aquaculture practices such as using virus free shrimp fry, improved water quality management, disease management, and better post-harvest handling will lead to higher productivity and higher quality of the shrimp harvest.

Thanks to the restoration and protection of mangroves, the coastal areas will be more resilient against the negative impacts of climate change and natural disasters. The restored mangroves will continue to absorb CO₂ and store them in the soils, and the roots will trap organic soil and plastic pollution from the surrounding waters. The CO₂ sequestered through the mangrove restoration is significantly higher compared to terrestrial forest and can potentially attract additional income for the community through carbon finance opportunities.

The shrimp aquaculture practice in Berau will not use artificial feed and fertilizer but will rely on natural foods such as plankton in the ponds. The practices, combined with effort to restore mangroves, will enable the farms to obtain an eco-certification (organic shrimp, aquaculture stewardship council), which will enable them to get a premium price for their shrimp. The community will also have diversified income from non-timber products and value-added shrimp products linked to the organic market, carbon finance, and mangrove ecotourism. Women will have more skills, technical capacity and access to market to products related to mangrove and aquaculture.

The best practices and lessons learned from the project will be disseminated to the local and national stakeholders of

mangrove ecosystem management, including the government, communities, academia and CSOs from East Kalimantan and other areas with mangrove ecosystems and aquaculture production. The experience in Berau is expected to inspire communities to replicate the mangrove protection and restoration model and inform policy makers to create the right enabling conditions.

Data and information on the status of biodiversity in the intervention sites will be shared to national level policy makers to support the evidence-base process of national biodiversity action plan development and its subsequent implementation.

Q18. Pathway to change

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

Project logic follows that:

If communities are supported and empowered to improve village spatial and development plans, and agree to protect 15,000 ha of mangroves through strengthened village governance and conservation agreements to stabilize biodiversity (Output 1), and

If improved aquaculture practices and mangrove restoration in the 100 ha SECURE demonstration site, and approved EAA village spatial and management plans for 5,000ha, increases shrimp productivity and improves biodiversity (Output 2), and If 400 persons (at least 50% women) across the 3 target villages with mangrove-dependent livelihoods have increased knowledge of, and have adopted sustainable aquaculture practices and alternative, deforestation-free mangrove-based industries with access to carbon financing opportunities (Output 3),

Then by 2025, the mangrove ecosystems and the important biodiversity and threatened species within, will be protected and managed by the community to support sustainable livelihoods, decrease poverty, and prevent biodiversity threats in 20,000 ha of mangroves in Berau (Outcome).

The novel mangrove restoration and shrimp carbon aquaculture program (SECURE) developed by YKAN employed in this project can be shared to create a best practice model to scale up efforts to other regions in Indonesia, and globally, to address poverty reduction, mitigate climate change impacts, and halt biodiversity threats (Impact).

Q19. Exit Strategy

How the project will reach a sustainable point and continue to deliver benefits post-funding? Will the activities require funding and support from other sources, or will they be mainstreamed in to "business as usual"? How will the required knowledge and skills remain available to sustain the benefits? How will your approach, if proven, be scaled?

The project delivers durable benefits to mangrove biodiversity and poverty reduction by creating the following situations:

1. Improved aquaculture practices applied outside of the project's demonstration areas, are delivering direct financial benefits.
2. Government agencies and community groups successfully collaborate to sustainably manage existing mangroves.
3. Capacity is developed and deployed within the community to design and operate small enterprises selling mangrove-based products.


Regarding situation #1, the financial benefits in combination with the project's technical, educational, and promotional communications products, and the integration of the participatory planning approaches into the work of relevant government agencies, means that further external intervention and financial support will not be necessary to ensure continued use of improved aquaculture practices in a place, and their expansion to other areas.

Regarding situation #2, community-led protection and restoration of mangroves will deliver economic benefits through higher sustainable yields of shrimp and non-timber forest products, and through enhanced ecosystem services which benefit neighbouring aquaculture and tourism. While direct economic benefits combined with an awareness campaign will make the community willing to join mangrove protection and restoration activities, there is a need to cover the ongoing costs of community-led management actions. The project will tap potential carbon financing arising from reduced emissions and enhanced sequestration arising from the protection and restoration activities, to provide an ongoing mechanism to fund such management costs.


Regarding situation #3, the project will strengthen the capacity of village governments and village owned enterprises (BUMDes) to both manage business enterprises facilitated by the project, and to analyse, plan and launch new businesses. The durability of the mangrove-based livelihood improvements brought about by the project is expected to be supported and financed by market actors or, where appropriate, to be further supported by the state (e.g., through village funds -

Dana Desa).

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

 [YKAN - R28S2-1005 - Additional annex](#)

 31/01/2022

 13:21:08

 pdf 490.63 KB

Section 7 - Risk Management

Q20. 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.

Projects should also draft their initial risk register using the [Risk Assessment template](#) provided, and be prepared to submit this when requested if they are recommended for funding. Do not attach this to your application.

Risk Description	Impact	Prob.	Gross Risk	Mitigation Header	Residual Risk
Fiduciary The project will disburse funds (> GBP5,000) to the community groups for aquaculture operations. Some funds will also be disbursed to local CSO partners to support the development of trainings and public consultations. There is an inherent risk that funds are misused impacting the project output targets.	Medium	Possible	Minor	YKAN builds on 20 years experience working in Berau when selecting trustworthy partners with good track records. Payments will be mainly performance based with strict monitoring of progress of activities/deliverables before payment is made. YKAN will provide training for the partners to ensure a good governance in managing the project.	Minor
Safeguarding The project will prioritize support to women's livelihoods. There is a minor risk that male relations of participating women will disagree with absence of wives or daughters from the house to attend meetings, trainings, and women-only workshops, which could lead to domestic violence.	Major	Rare	Medium	YKAN has conducted regular Free, Prior and Informed Consent protocols since the commencement of the SECURE (2018), enabling an understanding of community perception minimizing the risk of gender-based violence. YKAN's Field Coordinators live within the community to help inform them about project output, objectives, activities, and the proposed benefits.	Minor


Delivery Chain	Medium	Rare	Minor	YKAN will create a monthly coordination meeting with project partners that supporting pond operation and maintenance to monitor the progress, challenges, and make necessary adjustments. We will also create a mobile phone WhatsApp group which will provide convenient and quick day-to-day updates.	Minor
The aquaculture operational work will be subcontracted by YKAN. Due to the coordination complexity of this important step in the delivery chain, there is a risk of miscommunication between the parties that may lead to an activity delay.					
Risk 4	Medium	Possible	Medium	We will carefully select pond sites which have potential high harvest success by taking into consideration the pond harvest history, and by measuring soil and water quality, and follow all known best practices. In our communication with the communities, we will emphasize the long-term improvement aim of the SECURE approach.	Minor
Although previously tested, the SECURE aquaculture method is a relatively new approach that has not yet been implemented by other organizations or communities. Due to unique location characteristics, there is a risk that this new approach will not immediately improve productivity, leading to disengagement of the shrimp farmers.					
Risk 5	Major	Rare	Medium	YKAN conducts mandatory international field work safety standards training, boating safety, strictly followed by YKAN staff and partners working in the project area. In Indonesia, safety coordinators evaluate safety of remote travel, provide guidance and necessary equipment, and assign local wildlife guide for the travellers.	Minor
Safeguarding -There is a safety risk of boat accidents and/or animal attacks for staff traveling to the project sites located in remote areas of Berau that can only be accessed by boat.					
Risk 6	Major	Possible	Major	We have staff based in Berau and living in the village with the community. Thus, during travel restrictions, we can still continue most of the work through our field staff. In the last two years, we have also improved our online communication systems with the village to enable online training.	Minor
The high Covid-19 cases have in the past caused the Indonesian government to restrict inter-provincial and local movement that devastated the economy, including aquaculture. The Covid-19 cases are still very fluctuating and unpredictable. Thus, the Government may restrict people movement again at any time that may threatening our project.					

Section 8 - Implementation Timetable

Q21. Provide a project implementation timetable that shows the key milestones in project activities

Provide a project implementation timetable that shows the key milestones in project activities. Complete the Word template as appropriate to describe the intended workplan for your project.

Please add/remove columns to reflect the length of your project. For each activity (add/remove rows as appropriate) indicate the number of months it will last, and fill/shade only the quarters in which an activity will be carried out. The workplan can span multiple pages if necessary.

 [YKAN - DIR28S2-1005 - Timetable](#)

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Section 9 - Monitoring and Evaluation

Q22. 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.

Darwin Initiative 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](#)).

The project's logframe describes critical assumptions and specific indicators of progress and impact that need to be monitored and incorporated into the adaptive management of the project and its governance. Direct responsibility for implementing monitoring and evaluation activities lies with the "Project Manager" position and the responsibility for ensuring the information is used appropriately in adaptive management, reporting to stakeholders, and project governance lies with the "Project Director" position. The project will also be subject to internal scrutiny by the organisation's Senior Manager Team (SMT) and Indonesia Leadership Team (ILT), which adds two additional layers of review and evaluation by YKAN's technical and operational leadership.

While not responsible for the project's M&E, YKAN program activities are carried out in cooperation with the Government of Indonesia, Ministry of Environment and Forestry and Ministry of Marine Affairs and Fisheries, and relevant Local Government Agencies. These government entities will contribute information and be engaged in, monitoring and evaluating the project's progress towards intended outcomes and the project's unintended consequences. The key government counterparts for this M&E work are the heads of the Fisheries Agency and Forestry Agency of the Berau Regency Government.

The project will arrange for appropriate M&E responsibilities for compliance and impact indicators to be established with local partners and stakeholder groups in the field and will formally incorporate these into activity level agreements and budgets.

As presented in the project logframe, there is a deliberate focus on:

1. Monitoring changes in knowledge, preferences, and capacity of key stakeholder groups in regard mangrove protection, improved aquaculture practices, and mangrove-based enterprises for poverty alleviation.
2. Measuring the health and productivity of aquaculture ponds through site-based surveys, record keeping and collection.
3. Monitoring compliance with agreements and plans for mangrove protection.
4. Measuring the benefits and costs of designing and operating small enterprises selling mangrove-based products.
5. Monitoring the impacts and unintended consequences of all the project's interventions on poverty and equity.
6. Measuring changes in the condition of degraded mangrove areas selected for protection and restoration, the biodiversity, through scientific surveys, citizen science and local knowledge.

The first four items above will deliver timely information of value to adaptive management of the project. The last two items above will generate information over a longer time frame and be of value for assessing the project's impacts and providing lessons for others working to conserve biodiversity and tackle rural poverty in mangrove areas of Indonesia. YKAN will be responsible for all M&E actions required for items 1, 3, 4, and 5, as described in the log-frame.

The Faculty of Biological Sciences, University of Leeds, will be responsible for M&E actions required for items 2 and 6 above,

and will work with the Faculty of Fisheries and Marine Science, Mulawarman University as its local implementation partner.

Total project budget for M&E in GBP (this may include Staff, Travel and Subsistence costs)

██████████

Percentage of total project budget set aside for M&E (%)

█

Number of days planned for M&E

118

Section 10 - Logical Framework


Q23. Logical Framework

Darwin Initiative 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.


- [Stage 2 Logframe Template](#)

Please complete your full logframe in the separate Word template and upload as a PDF using the file upload below. – **please do not edit the template structure other than adding additional Outputs if needed as a logframe submitted in a different format may make your application ineligible.** Copy your Impact, Outcome and Output statements and your activities below - these should be the same as in your uploaded logframe.

Please upload your logframe as a PDF document.

 [YKAN - DIR28S2-1005 - Logframe](#)

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Impact:

Biodiversity threats halted, poverty reduced and long-term climate changed impacts mitigated in mangrove ecosystems in Berau Regency, East Kalimantan, Indonesia

Outcome:

Biodiversity threats prevented from protection of 15,000ha intact mangrove forests and improved biodiversity and community income from management plans for 5,000ha of shrimp ponds in Berau Regency, East Kalimantan

Project Outputs

Output 1:

Management plans for the protection of 15,000ha of mangrove ecosystems and their biodiversity are developed, approved, and implemented through strengthened village governance capacity

Output 2:

10-year mangrove restoration and biodiversity improvement plan developed and approved for 5,000 ha of shrimp ponds and, a 100 ha SECURE model demonstration site (within the 5,000ha area) is established by the end of the project.

Output 3:

At the completion of the project (2025) the income of people working in shrimp aquaculture, mangrove ecotourism, and mangrove-based household industries in the 3 target villages is increased by 15% (compared to baseline).

Output 4:

No Response

Output 5:

No Response

Do you require more Output fields?

It is advised to have fewer than 6 Outputs since this level of detail can be provided at the Activity level.

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.

- 1.1.1 YKAN's Field Coordinators implement SIGAP approach through a live-in community facilitation to develop management plans for the protection of 15,000-ha intact mangroves.
- 1.1.2 GIS spatial analysis for demarcation, zoning, and producing preliminary management plans as well as communication and monitoring.
- 1.1.3 Final workshops in each village where the Village Government formally adopt the mangrove protection management plans and submit the documents to the Regency Government and the MOEF.
- 1.1.4 Consultation workshops at regency and provincial levels to assist the Village Governments to secure the Regency Government approval Decree for the management plan of the Protected Mangroves and the official endorsement from the MOEF.
- 1.2.1 Conduct biodiversity status reports (baseline and annually) that will include biodiversity survey and analyses by the collaborating university partners
- 1.2.2 Conduct three-monthly physical-chemical characteristics of the water in protected 15,000 ha mangrove area and in restored area and daily measurement for the aquaculture shrimp ponds area of the 100ha SECURE site
- 1.2.3 Develop biodiversity spatial prioritisation and protection recommendation which will inform the development of mangrove protection management plans across the three villages.
- 1.2.4 Provide biodiversity status data and information to Indonesia's Ministry of National Development Planning for the development of Indonesia's Biodiversity Strategy and Action Plan.
- 1.3.1 Undertake capacity needs assessment (human resources and equipment) and develop a strategy (training plan, curriculum, and inventory of tools) to improve the capacity of the government officials and community leaders.
- 1.3.2 Implement training plans (3-5 workshop sessions) for village government and community leaders on mangrove protection policies and standard operating procedures
- 1.3.3 Establish community surveillance group and conduct community outreach protection and enforcement training sessions for 15 community surveillance group members.
- 1.3.4 Purchasing surveillance equipment, based on capacity needs assessment, anticipated to include: radio communication, drone, GPS, binoculars.
- 1.3.5 Conduct pre- and post-capacity building surveys to evaluate impact of both training and improved access to equipment
- 1.3.6 Disseminate lessons learned and best practices for community-based mangrove protection and restoration to the wider audiences
- 2.1.1 Capacity analysis for shrimp aquaculture in the three villages using biodiversity and water quality information from 1.2 and develop preliminary plans for EAA development in the three villages.
- 2.1.2 Facilitate process to develop EAA using SIGAP approach in the three villages (monthly meetings with community leaders)
- 2.1.3 Facilitate follow-up public consultations at the Regency level to obtain approval (Regent Decree) from Berau Regency Government for the implementation of EAA in the three villages.
- 2.2.1 Redesign the existing shrimp ponds for SECURE model (aquaculture area & restoration area), carried out by community group (new pond dikes, water gate, shrimp pond canals, and supporting facilities)
- 2.2.2 Conduct mangrove restoration with the community (~80% of the 100ha SECURE shrimp pond demonstration site) through either hydrological improvement approach or hybrid engineering approach, depending on local situation.

- 2.2.3 Six-monthly vegetation analyses to monitor the restoration progress and identify actions necessary to ensure the success of restoration.
- 2.3.1 Provide materials and technical expertise for community group to operate the SECURE ponds.
- 2.3.2 Community groups operating the total 20 ha shrimp ponds using YKAN's Better Management Practices for SECURE ponds.
- 2.3.3 Improve the community capacity (100 households) on implementing mangrove protection, restoration, and aquaculture improvement through the establishment of a community Aquaculture Field School (Sekolah Lapang Perikanan).
- 2.4.1 Measure the carbon soil content, biomass, and analyse land cover change to provide accurate information about potential carbon emission reduction from the SECURE pond restoration at commencement and end of project.
- 2.4.2 Analyse the Berau mangrove carbon information, national regulation, and market opportunity to evaluate of the viability of carbon financing
- 2.5.1 YKAN facilitates carbon project training for village government and BUMDES staff regarding carbon measurement, monitoring, and carbon accounting 101
- 2.5.2 YKAN will facilitate the Village Government and BUMDES staff to attend an apprenticeship week in a mangrove carbon project in Indonesia (e.g. in North Sumatra).
- 3.1.1 Gather and analyse data on the natural resource conservation, poverty and livelihood, aquaculture practices and productivity, and village governance and social inclusiveness
- 3.1.2 Conduct training sessions and knowledge surveys to develop and strengthen Village Business Units by coaching BUMDES staff on the community's mangrove-based products business models.
- 3.1.3 Facilitate apprenticeship of community group members in a successful mangrove-based products business in other regency or province (e.g. South Sulawesi Province or East Java).
- 3.2.1 Provide equipment needed by the Village Business Units for improving the quality of their products
- 3.2.2 Assist the communities in obtaining eco-certification (anticipated to be ASC) certification for two SECURE ponds and 10 halal and Indo GMP certificate for their mangrove-based products
- 3.2.3 Facilitating access to market through exhibitions and meetings with product off-takers, linking the community enterprises with financial institutions, and help connecting the community with relevant experts in livelihoods development.

Section 11 - Budget and Funding

Q24. Budget

Please complete the appropriate Excel spreadsheet, which provides the Budget for this application. Some of the questions earlier and below refer to the information in this spreadsheet. Note that all Darwin Main should be using the over £100,000 template. Please refer to the [Finance Guidance](#) for more information.

- [Budget form for projects over £100k](#)

Please ensure you include any co-financing figures in the Budget spreadsheet to clarify the full budget required to deliver this project.

N.B.: Please state all costs by financial year (1 April to 31 March) and in GBP. The Darwin Initiative cannot agree any increase in grants once awarded.

Please upload your completed Darwin Budget Form Excel spreadsheet using the field below.

 [YKAN - DIR28S2-1005 - Budget](#)
 31/01/2022
 16:23:20
 xlsx 79.69 KB

Q25. Financial Risk Management

Explain how you have assessed the risks and threats that may be relevant to the successful financial delivery of this project. This includes risks such as fraud, bribery or corruption, but may also include the risk of fluctuating foreign exchange, delays in procurement or recruitment and internal financial processes such as storage of financial data.

The legal department of YKAN has identified "Risk Factors" that typically create a legal, financial, or reputational risk to the organisation and projects and therefore require internal control and risk mitigation and prevention as the following actions:

To ensure compliance anti-corruption and anti-bribery laws, YKAN has adopted an SOP on anti-corruption compliance that governs procedures for interaction and contract with government agency/officials, including travel, gifts, meals or entertainment.

To Perform Annual Program Audit (External Auditor and Internal Auditor). We periodically meet various functions to determine key area of audit (Human Resources, IT, Finance, Grant, Compliance, Legal, Development and Marketing. As for specific financial and fraud risk factor to avoid and mitigate financial risk for certain characteristics, we conduct the following actions:

- a. Avoid Large amounts of cash on hand or processed.
- b. Development of asset management system / Inventory.
- c. Adequate segregation of duties or independent checks.
- d. Adequate system of authorization and approval (level of authority, position and limitation amount approval).
- e. Adequate access controls over automated records, including controls over and review of computer systems event logs.

Q26. Funding

Q26a. Is this a new initiative or does it build on existing work (delivered by anyone and funded through any source)?

- Development of existing work

Please provide details:

YKAN's Oceans Program has been working in Berau since 2002. In collaboration with community groups, CSO, Mulawarman University, and IPB Universities. The program initially assisted the government to establish marine protected areas. Over the last 2 years, the program has expanded to include mangrove restoration projects funded by PT Sarana Multi Infrastruktur (PT SMI) and the Caterpillar Foundation that also employ the YKAN developed Shrimp Carbon Aquaculture method (SECURE) to increase mangrove area without compromising community income from aquaculture. To provide easy access for the communities of 2 villages, YKAN is currently establishing 4 SECURE demonstration ponds in Berau, East Kalimantan Province, and 2 ponds in South Sumatra Province. This proposed Darwin Initiative project aims to expand the SECURE pond models from 4 to 10 ponds in Berau with sustainable community income in place from carbon financing, premium priced eco-certified shrimp, non-timber mangrove products and ecotourism.

Q26b. Are you aware of any current or future plans for similar work to the proposed project?

- Yes

Please give details explaining similarities and differences, and explaining how your work will be additional and what attempts have been/will be made to co-operate with and learn lessons from such work for mutual benefits.

Conservation International (CI) Indonesia is currently developing a "climate smart aquaculture" model, encouraging farmers to restore mangroves in and adjacent to aquaculture ponds. In 2021, CI selected sites in West Java to implement this model. While both CI and YKAN's models share the objective to restore mangroves associated with shrimp ponds, CI's model differs in that they will implement their model in intensive shrimp farms (high production inputs) with lower carbon sequestration, while YKAN will implement their SECURE model in extensive ponds with higher carbon sequestration potential.

In addition, to reach their target of restoring 600,000 ha of mangroves, Indonesia's Peatland and Mangrove Restoration Agency (BRGM), propose to use a silvofishery approach for mangroves degraded by aquaculture ponds. They plan to do this by manually planting seedlings directly inside the aquaculture ponds (mix mangrove and shrimp). This differs from YKAN's Secure model that allow mangroves to recover naturally and will cultivate shrimp in separate ponds dedicated for aquaculture. BRGM and YKAN have recently signed a cooperation agreement for YKAN to provide technical expertise to BRGM in mangrove restoration, with the potential to integrate YKAN's Secure model with BRGM's silvofishery model.

Q27. Capital items

If you plan to purchase capital items with Darwin 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.

The capital purchase of capital will comprise of:

1. Surveillance tools and equipment such as drone, GPS, camera, radio communication, and signboards, for the Community Surveillance Groups. After the project end, the tools will be transferred to the Village Governments.
2. Livelihood's equipment such as stove, cooler, and solar panels, will be owned by the community enterprise groups.
3. Aquaculture housing and construction support to improve the pond dikes, canals, housing, to meet safety and hygiene standards, and water quality multi-meter, will be owned by the Community Groups managing the SECURE pond models

Q28. Value for Money

Please describe why you consider your application to be good value for money including justification of why the measures you will adopt will secure value for money.

The project will benefit from YKAN's extensive local knowledge and experience providing value for money by delivering a biodiversity creation-poverty reduction 'win-win'. YKAN's SIGAP and SECURE approaches have been tested and proven to achieve successful conservation outcomes through supporting local people to sustainably use natural resources and improve their well-being.

SIGAP allows the integration of project to village development planning, thus securing budget allocation for the continuation of SECURE. With the community already having a sense of ownership and shared vision of the project, they are enabled to be more proactive and prepared in anticipating externally driven land use change, such as oil palm and other large-scale plantation development, mining, etc., that may affect their land and cause threats to biodiversity.

Developed to address the mangrove-shrimp pond conflict, YKAN's SECURE method mitigates climate change impacts through increased carbon sequestration and often provides a self-perpetuating cycle of uptake by neighbouring aquaculture communities. Once a SECURE community demonstrates success with increased shrimp yields, other communities will follow resulting in further habitat expansion for biodiversity.

As part of a global network of scientists, YKAN staff are Indonesian, fluent in English reducing travel and translation costs and ensuring effective communications with target villages.

Section 12 - Safeguarding and Ethics

Q29. Safeguarding

Projects funded through the Darwin Initiative must fully protect vulnerable people all of the time, wherever they work. In order to provide assurance of this, projects are required to have appropriate safeguarding policies in place.

Please confirm the Lead Partner has the following policies in place and that these can be available on request:

Please upload the lead partner's Safeguarding Policy as a PDF on the certification page.

We have a safeguarding policy, which includes a statement of our commitment to safeguarding and a zero tolerance statement on bullying, harassment and sexual exploitation and abuse

Checked

We have attached a copy of our safeguarding policy to this application (file upload on certification page)	Checked
We keep a detailed register of safeguarding issues raised and how they were dealt with	Checked
We have clear investigation and disciplinary procedures to use when allegations and complaints are made, and have clear processes in place for when a disclosure is made	Checked
We share our safeguarding policy with downstream partners	Checked
We have a whistle-blowing policy which protects whistle blowers from reprisals and includes clear processes for dealing with concerns raised	Checked
We have a Code of Conduct for staff and volunteers that sets out clear expectations of behaviours - inside and outside the work place - and make clear what will happen in the event of non-compliance or breach of these standards	Checked

Please outline how you will implement your safeguarding policies in practice and ensure that downstream partners apply the same standards as the Lead Partner. Please highlight any key safeguarding risks, including human rights issues, their assessment and measures to mitigate and manage them.

All YKAN employees will undergo TNC's mandatory annual Code of Conduct training that includes certification regarding organizational values, appropriate behavior and safeguarding policies and procedures, within the workplace and with all persons whom YKAN interact. YKAN's due diligence procedures will map project partners safeguarding policies to ensure that our downstream partners conduct themselves in ways consistent with our Code. If TNC's policies are more protective than the local laws and customs then those that work for, or with YKAN, then they will be held to higher standards as set forth in the TNC Code. YKAN's field coordinators who live and work with the communities will also provide a smooth 2-way flow of communication that can help to bridge any gap to rectify social norms that do not comply with the YKAN Code. Since this project will work directly with the local communities, a gender disaggregated M&E process and grievance mechanism will be put in place to promptly respond to and mitigate any unintended negative impacts to human rights that may arise. To mitigate any social harm with new communities that we engage in this project, we will apply a FPIC to encourage a transparent and inclusive approach.

Q30. Ethics

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

Women contribute significantly to aquaculture but receive less benefits than men. Compared to men and boys, women and girls have different roles, knowledge, opportunities, and preferences regarding mangrove management and mangrove-based livelihoods. Competition for resources and development opportunities in rural settings is high and often accompanied by existing power relations and inequities that create ethical and equity risks when planning and executing interventions in rural settings. These risks need to be addressed to ensure planned interventions are feasible, enjoy broad stakeholder support, and can deliver a result that involves a fair distribution of the benefits and costs generated by an intervention.

YKAN has established core values relating to integrity beyond reproach, respect for people, communities and culture, and commitment to diversity. It has policies, procedures, and staff training on FPIC, gender, diversity, equity, and inclusiveness, to ensure that its efforts to conserve biodiversity is based on sound ethical principles and does no harm to poor, vulnerable or marginalised people. The project will use gender disaggregated planning, monitoring, evaluation, and reporting approaches. It will apply FPIC and other relevant safeguard policies and will ensure that its implementation partners are aligned to these approaches and safeguard policies.

Section 13 - FCDO Notifications

Q31. FCDO Notifications

Please state whether there are sensitivities that the Foreign Commonwealth and Development Office will need to be

aware of should they want to publicise the project's success in the Darwin Initiative in any country.

No

Please indicate whether you have contacted FCDO Embassy or High Commission to discuss the project and attach details of any advice you have received from them.

Yes (no written advice)

Section 14 - Project Staff

Q32. 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?
Muhammad Ilman	Project Leader	30	Checked
Maria Berger	Research co-lead UK	5	Checked
Dewi Embong Bulan	Research co-lead Indonesia	30	Checked
Basir	Field manager	70	Checked


Do you require more fields?

Yes


Name (First name, Surname)	Role	% time on project	1 page CV or job description attached?
Idham Malik	Aquaculture Coordinator	90	Checked
No Response	No Response	0	Unchecked
No Response	No Response	0	Unchecked
No Response	No Response	0	Unchecked
No Response	No Response	0	Unchecked
No Response	No Response	0	Unchecked
No Response	No Response	0	Unchecked
No Response	No Response	0	Unchecked

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

Ensure the file is named clearly, consistent with the named individual and role above.

 YKAN - DIR28S2-1005 - CVs

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 pdf 169.45 KB

Have you attached all project staff CVs?

Yes

Section 15 - Project Partners

Q33. Project partners

Please list all the Project Partners (including the Lead Partner - i.e. the 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 and planned.

This section should demonstrate the capability and capacity of the Project Partners to successfully deliver the project. Please provide Letters of Support for all project partners or explain why this has not been included.

The partners listed here should correspond to the Delivery Chain Risk Map (within the Risk Register template) which you will be asked to submit if your project is recommended for funding.

Lead partner name: Yayasan Konservasi Alam Nusantara (YKAN)

Website address: <https://ykan.or.id/>

Details (including roles and responsibilities and capacity to engage with the project):

YKAN will :

- Lead the project consortium and provide the overall programme management, facilitate communications and provide site coordination.
- Output 1. Lead and provide experience in using the SIGAP approach with the communities to develop management plan for the mangrove conservation and EAA development.
- Output 2. Lead the development of SECURE ponds and the pond operation
- Output 3. Lead the development of livelihoods including assessment, training, networking, and link to market and financial support.
- Lead monitoring and evaluation, including join monitoring with the Government.

Allocated budget (proportion or value):

██████████

Represented on the Project Board 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: Faculty of Biological Sciences, University of Leeds

Website address: <https://biologicalsciences.leeds.ac.uk/>

Details (including roles and responsibilities and capacity to engage with the project): University of Leeds, UK, will work with Mulawarman University, Indonesia, to provide expertise in establishing the scientific basis for the project design, monitoring and evaluation. The activities include:
1.2.1 and 1.2.3 Create a spatial prioritisation based on biodiversity and physical and chemical characteristics of the areas to guide the development of spatial plan to establish the FAO's Ecosystem Approach to Aquaculture.
1.2.1 Track the project impacts on aquatic biodiversity using environmental DNA technology.
1.2.2 Monitor the project impact on water quality of mangroves and aquaculture.
1.2.2 Track flora and fauna improvement due to mangrove restoration.
1.2.4 Lead and co-lead scientific publications of the project's lessons learned.

Allocated budget: ██████████

Represented on the Project Board Yes

Have you included a Letter of Support from this organisation? Yes

2. Partner Name: Faculty of Fisheries and Marine Science, Mulawarman University

Website address: <http://fpik.unmul.ac.id/>

Details (including roles and responsibilities and capacity to engage with the project): Mulawarman University, East Kalimantan will work with University of Leeds, provide local research expertise in conservation biology and leading the socio-economic aspect of the research and publication.
1.2.1 and 1.2.3 Colect necessary information in the villages to create a spatial prioritisation for mangrove protection and to establish the FAO's Ecosystem Approach to Aquaculture.
1.2.1 Co-lead team to track the project impacts on aquatic biodiversity using environmental DNA technology.
1.2.2 Lead a field team to monitor the project impact on water quality of mangroves and aquaculture.
1.2.2 Track flora and fauna improvement due to mangrove restoration.
1.2.4 Lead and co-lead scientific publications of the project's lessons learned.

Allocated budget: ██████████

Represented on the Project Board Yes

Have you included a Letter of Support from this organisation? Yes

3. Partner Name: *No Response*

Website address: *No Response*

Details (including roles and responsibilities and capacity to engage with the project): *No Response*

Allocated budget: £0.00

Represented on the Project Board Yes
 No

Have you included a Letter of Support from this organisation? Yes
 No

4. Partner Name: *No Response*

Website address: *No Response*

Details (including roles and responsibilities and capacity to engage with the project): *No Response*

Allocated budget: £0.00

Represented on the Project Board Yes
 No

Have you Yes
included a Letter No
of Support from
this
organisation?

5. Partner *No Response*
Name:

Website *No Response*
address:

Details *No Response*
(including roles
and
responsibilities
and capacity to
engage with the
project):

Allocated *£0.00*
budget:

Represented on Yes
the Project No
Board

Have you Yes
included a No
Letter of
Support from
this
organisation?

6. Partner *No Response*
Name:

Website *No Response*
address:

Details *No Response*
(including roles
and
responsibilities
and capacity to
engage with the
project):

Allocated budget: £0.00


Represented on the Project Board 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.

No Response

Please provide a cover letter responding to feedback received at Stage 1 if applicable and a combined PDF of all letters of support.

 [YKAN - DIR28S2-1005 - Letters of support](#)

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Section 16 - Lead Partner Capability and Capacity

Q34. Lead Partner Capability and Capacity

Has your organisation been awarded a Darwin Initiative funding before (for the purposes of this question, being a partner does not count)?

No

If no, please provide the below information on the lead partner.

What year was your organisation established/ incorporated/ registered? 01 January 2014

What is the legal status of your organisation? NGO

How is your organisation currently funded?

YKAN is an affiliate of The Nature Conservancy (TNC) a science-based organization and experienced in advancing conservation throughout the world since 1951. As a non-profit organization, YKAN works with TNC to secure funding for strategies of global significance contributing to our Shared Conservation Agenda from grants, donations and sponsorship from the government or general public.

Domestically, YKAN's Development and Membership teams actively pursue in-country fundraising from public, private, and individual donors. AS per December 2021 report, YKAN funding source were:

1. Private donor: 78%
2. Public donor 21%
3. Others: 1%

Describe briefly the aims, activities and achievements of your organisation. Large organisations please note that this should describe your unit or department.

Aims

YKAN Indonesia Oceans Program support the Government of Indonesia through collaboration with private sectors, academics, and community promoting science-based conservation of marine and fisheries resources for the benefit of the people.

Activities

We have cooperation agreement with Government of Indonesia to work together in designing and establishing an effective management of marine protected areas and marine spatial plan, improve fishery management, develop community sustainable livelihood, and promoting natural based solution for climate change issues through mangrove restoration and protection.

Achievements

YKAN's has successfully established collaborations to implement robust village development plans in more than 100 villages (through YKAN's innovative SIGAP program); and five mangrove-aquaculture models across Indonesia. YKAN has also supported the successful establishment of six new marine protected areas covering approximately 57,000 km² across Indonesia.

Provide details of 3 contracts/projects held by the lead partner that demonstrate your credibility as an organisation and provide track record relevant to the project proposed.

These contracts/awards should have been held in the last 5 years and be of a similar size to the grant requested in your Darwin application.

Contract/Project 1 Title

Establishment and integration of Marine Protected Areas, small-scale fisheries management, and improved community livelihoods in Indonesia's Bird's Head Seascape

Contract Value/Project budget (include currency)

██████████

Duration (e.g. 2 years 3 months)

4 years 7 months

Role of organisation in project

We lead a consortium of local tribal council (Ma'ya) and the Universitas Papua to implement the project. Our role is to provide expertise in MPA design, development, and effective management. We also lead efforts to improve coastal ecosystem resilience.

Brief summary of the aims, objectives and outcomes of the project The Project aims to assist GOI in the designation of 460,000 ha new MPAs in Bird's Head Seascope. We will also establish community sustainable livelihood, improve ecosystem resilience against climate change and natural disasters, and build the capacity of West Papua Provincial government to manage areas in and around MPA.

Client/independent reference contact details (Name, e-mail) Markus Knigge
Executive Director, Blue Action Fund
[REDACTED]

Contract/Project 2 Title "SNAPPER" – Supporting nature and People – Partnerships for Enduring Resources

Contract Value/Project budget (include currency) [REDACTED]

Duration (e.g. 2 years, 3 months) 6 years

Role of organisation in project Lead project implementation

Brief summary of the aims, objectives and outcomes of the project YKAN has been working with fishers, communities, companies, and government agencies to achieve sustainability in the deep water snapper-grouper fishery. The strategy is to improve data, science, and technology, capacity building of stakeholders in fishery management, and improve planning and management through support to Ministry of Marine Affairs and Fisheries (MMAF) in policy and governance.

Client/independent reference contact details (Name, e-mail) Ahmad Hafizh Adyas, Marine Program USAID Indonesia [REDACTED]
John David Claussen, Program Officer, Conservation and Science Program of The David and Lucile Packard Foundation, [REDACTED]

Contract/Project 3 Title Sustainable Environmental Governance Across Regions (USAID SEGAR)

Contract Value/Project budget (include currency) [REDACTED]

Duration (e.g. 2 years, 3 months) 5 years

Role of organisation in project Consortium partner, lead applicant is Chemonics

Brief summary of the aims, objectives and outcomes of the project The Project aims for replication of TNC's community empowerment approach across all SEGAR landscapes to ensure sustainable forest management and improved livelihoods, facilitate public-private partnerships in the form of Essential Ecosystem Area (KEE) to reduce threats to biodiversity and greenhouse gas emissions from land use, as well as develop and facilitate sustainable forest management and financially viable natural resources commodity production within the private sector.

Client/independent reference contact details (Name, e-mail) Peter Doyle (USAID SEGAR Chief of Party)
[REDACTED]

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

If yes, please upload these on the certification page. Note that this is not required from Government Agencies.

Yes

Section 17 - Certification

Q35. Certification

On behalf of the

Trustees

of

Yayasan Konservasi Alam Nusantara (YKAN)

I apply for a grant of

[REDACTED]

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 project key project personnel, letters of support, budget, logframe, safeguarding policy and project implementation timetable (uploaded at appropriate points in application)
- Our last two sets of signed audited/independently verified accounts and annual report are also enclosed.





Checked

Name Dr. Herlina Hartanto

Position in the organisation

Executive Director





Signature (please upload e-signature)





 [YKAN - DIR28S2-1005 - Certification](#)
 31/01/2022
 14:44:32
 pdf 102.95 KB

Date





31 January 2022

Please attach the requested signed audited/independently examined accounts.

 [YKAN - DIR28S2-1005 - Audit report FY20](#)
 31/01/2022
 14:44:44
 pdf 428.62 KB

 [YKAN - DIR28S2-1005 - Audit report FY19](#)
 31/01/2022
 14:44:40
 pdf 1.12 MB

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

 [YKAN - DIR28S2-1005 - Safeguarding Policy](#)
 31/01/2022
 14:44:53
 pdf 5.36 MB

Section 18 - Submission Checklist

Checklist for submission

	Check
I have read the Guidance, including the "Darwin Initiative Guidance", "Monitoring Evaluation and Learning Guidance", "Risk Guidance" and "Financial 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 included a 1 page CV or job description for all the Project Staff identified at Question 32, including the Project Leader, or provided an explanation of why not.	Checked
I have included a letter of support from the Lead Partner and partner(s) identified at Question 33, or an explanation of why not.	Checked

I have included a cover letter from the Lead Partner, outlining how any feedback received at Stage 1 has been addressed where relevant.	Checked
I have included a copy of the Lead Partner's safeguarding policy, which covers the criteria listed in Question 29.	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
I have included a signed copy of the last 2 annual report and accounts for the Lead Partner, or provided an explanation if not.	Checked
I have checked the Darwin website immediately prior to submission to ensure there are no late updates.	Checked
I have read and understood the Privacy Notice on the Darwin Initiative 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 Darwin Initiative and our sister grant scheme, the IWT Challenge Fund. 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 Darwin Initiative including project details (usually title, lead partner, project leader, location, and total grant value).