



Department
for Environment
Food & Rural Affairs

Submit by 2359 GMT on Monday 29 January 2018

Darwin Initiative Application for Grant for Round 24: Stage 2

Before completing this form, please read both the Fair Processing Notice on pages 17 and 18 of this form and the [Guidance](#). Where no word limits are given, the size of the box is a guide to the amount of information required. Information to be extracted to the database is highlighted blue. Blank cells may render your application ineligible

Eligibility

1. Name and address of organisation

(NB: Notification of results will be by email to the Project Leader in Question 6)

Applicant Organisation Name:	Yayasan Planet Indonesia
Address:	Jalan Sungai Raya Dalam
City and Postcode:	Komplek Bumi Batara I , Blok B. 37, 78391
Country:	Indonesia
Email:	
Phone:	

2. Stage 1 reference and Project title

Stage 1 Ref:	Title (max 10 words): Restoring Coastal Fisheries through Sustainable Development in Indonesia.
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3. Summary of Project

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 [GOV.UK](#). Please bear this in mind, and write this summary for a non-technical audience.

(max 80 words)

Our project focuses on creating nature-based solutions to catalyse sustainable development in coastal communities. We create [conservation compacts](#) with communities which are bi-lateral partnerships to both promote fair and equitable development in tandem with conservation. This project utilizes temporary mangrove reserves to restore coastal fisheries through providing community-based services.

4. Country(ies)

Which eligible host country(ies) will your project be working in? You may copy and paste this table if you need to provide details of more than four countries.

Country 1: INDONESIA	Country 2:
Country 3:	Country 4:

5. Project dates, and budget summary

Start date: July 1st 2018		End date: March 31, 2021		Duration: 2 yrs 9 months
Darwin funding request (Apr – Mar)	2018/19 £ 129,520	2019/20 £ 124,020	2020/21 £ 135,020	Total £ 388,560
Proposed (confirmed & unconfirmed) matched funding as % of total Project cost				Confirmed: 36% (£ 140,000 will be matched over the 3 years for a total project budget of £528,560, though possibly more if unconfirmed funding becomes available)

6. Partners in project. Please provide details of the partners in this project and provide a CV for the individuals listed. You may copy and paste this table if necessary.

Details	Project Leader	Co Project Leader
Surname	Fitzpatrick	Miller
Forename (s)	Dr. Ben	Adam
Post held	Executive Director	Executive Director
Organisation (if different to above)	Oceanwise Australia	Planet Indonesia – USA

7. Has your organisation been awarded a Darwin Initiative award before (for the purposes of this question, being a partner does not count)? No

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

Reference No	Project Leader	Title
N/A	N/A	N/A

8a. If you answered ‘No’ to Question 7 please complete Question 8a, b and c.

If you answered ‘Yes’, please go to Question 9 (and delete the boxes for Q8a, 8b and 8c)

What year was your organisation established/ incorporated/ registered?	2012
What is the legal status of your organisation?	NGO Yes Government No University No Other (explain)
How is your organisation currently funded?	(Max 100 words)

	We are currently funded by several grants in addition to donor contributions.
Have you provided the requested signed audited/independently examined accounts?	Yes

8b. Do not complete if you answered 'Yes' to Question 7.

Provide detail of 3 contracts/awards held by your organisation 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.

1. Title	Equator Prize
Value	\$10,000
Duration	2 years
Role of organisation in project	Administering the award and implementing the works program, monitoring and reporting on effectiveness and ensuring outcomes.
Brief summary of the aims, objectives and outcomes of the contract/award.	Fighting economic activities detrimental to the environment, Planet Indonesia identifies, under the leadership of the benefiting Dayak communities, sustainable livelihood opportunities through the development of conservation compacts and community businesses. Activities range from forest protection to anti-wildlife trafficking to securing land rights. Business groups have been set up in more than 50 villages, comprising 2,100 members, more than two-thirds of whom are women and/or indigenous. Community members are trained to run small-scale businesses, savings and loans programs build community capital, a revolving fund covers damages and operational costs, and coaching and mentoring ensures long-term sustainability of each community business. 30,000 hectares of forest have been protected and over 40,000 seedlings planted. To build awareness of the importance of conservation across generations, a fellowship program provides 50 high school students annually with funds to conduct adaptation and mitigation projects.
Client/ independent reference contact details (Name, e-mail, address, phone number).	

2. Title	Franciscan Sisters of Mary philanthropic and impact investment towards this coastal program.
Value	\$150,000 USD
Duration	3 years 2016 – 2018 inclusive
Role of organisation in project	This restricted grant has enabled Planet Indonesia to implement our Conservation Compact Approach to address sustainable fisheries and livelihoods associated with mangrove ecosystems in West Kalimantan, Indonesia.
Brief summary of the aims, objectives and	Implement Health, business and education initiatives for fishers and their communities in exchange for implementing Temporary

outcomes of the contract/award.	Mangrove enclosures and local marine management plans. To date we have reached over 600 women and youth with our targeted educational activities and enrolled 200 fishers in our Small to Medium Enterprise program and Marine Management plans. We have implemented one temporary mangrove closure and measured the response of this protection for improving fisheries CPUE. We have also undertaken baseline household surveys to benchmark improvement in living across a range of indicators. Work is ongoing and leads directly into this proposed project.
Client/independent reference contact details	

3. Title	Management and monitoring of invasive weeds into coastal ecosystems of Australia
Value	\$200,000 AUD
Duration	2+ years
Role of organisation in project	Overseeing and implementing all aspects of experimental design, technical data collection protocols, field operations, data processing, analysis and reporting.
Brief summary of the aims, objectives and outcomes of the contract/award.	Run experiments to assess the ecological and economic effectiveness of management interventions in restoring natural ecosystems. The first aim is to measure the effectiveness of treatments and management interventions and the second aim is to measure the economic efficiency of the management interventions. These require many elements to be successful including the deployment of monitoring protocols for assessing the impact on thousands of individual plants across many different land tenures on very broad spatial scales. It also requires measuring effort and establishing baseline estimates of plant density and rehabilitation effectiveness and change over time at 1 hectare plots. This requires deployment of a sophisticated data acquisition and management platform and drone based surveys of 24 vegetation plots over time. Outcomes will be determining the most economic and ecologically effective integrated management approaches.
Client/independent reference contact details	

8c. Do not complete if you answered 'Yes' to Question 7.e

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

<p>Aims (50 words)</p> <p>Planet Indonesia believe biodiversity loss is driven through two major pathways:</p> <ul style="list-style-type: none"> - Socio-economic inequalities in rural communities and, - Corrupt governments and poor regulatory frameworks creating entry points for illegal activities. <p>To address this, we have pioneered the combination of both bottom-up and top-down approaches to halt biodiversity loss.</p>
<p>Activities (50 words)</p>

Bottom-up: We provide community-based services in three sectors: business, education, and healthcare, in exchange for the conservation of ecosystems. We create bi-lateral partnerships to help overcome poverty while engaging them in new conservation and management plans.

Top-down: We provide intel, and guidance through undercover investigations and advocacy to government agencies.

Achievements (50 words)

- 3034 households enrolled in Conservation Compacts
- 250 women and youth reached through literacy programs annually
- 30,000 seedlings planted
- 5000ha of mangrove and 30000ha of primary rainforest under periodic closures
- 5 community-based patrol units created
- 4 arrests and 3000+ songbirds confiscated through government facilitation

9. Please list all the partners involved (including the Lead Institution) and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. This section should illustrate the capacity of partners to be involved in the project. Please provide written evidence of partnerships. Please copy/delete boxes for more or fewer partnerships.

<p>Lead institution and website: Planet Indonesia www.planetindonesia.org</p>	<p>Details (including roles and responsibilities and capacity to lead the project): (max 200 words)</p> <p>The Planet Indonesia NGO family consists of a USA-based 501c3 not-for-profit and an Indonesian-based NGO. Both have the same mission and vision, but roles slightly differ. The US organization focuses on international outreach and donor relations, particularly for grant-makers based in Europe and the US. Yayasan Planet Indonesia focuses on project implementation. Both are legally registered NGOs under the Direction of Adam Miller. They will:</p> <ul style="list-style-type: none"> - Implement field operations and ground works. - Manage staff implementing the program such as surveys of fishers and families and mangrove replanting. - Implement fisheries catch reporting at landing sites to establish effort, catch, size of fish, location, sex etc. - Oversee preliminary data management and processing preferably by locally trained staff. - Manage and assist local marine patrol units in patrols of the Mangrove Protected area and relevant data. - provide field support for specialist surveys such as assessments of mangrove health and fish ecosystem status. - Convene meetings and workshops relating to project and findings incorporating input from key local expertise, government officials and associated stakeholders. - Contribute to reports and publications presenting findings of the program. - Administer funds including the auditing of financials against project outputs and outcomes to DEFRA standards.
<p>Have you included a Letter of Support from this institution? If not, why not?</p>	<p>Yes</p>

Partner Name and website where available: Oceanwise Australia www.oceanwise.com.au	Details (including roles and responsibilities and capacity to engage with the project): (max 200 words) Oceanwise Australia under Dr Ben Fitzpatrick will be responsible for aspects of project and technical management and implementation: <ul style="list-style-type: none"> - Attend and contribute towards scheduled workshops and meetings presenting outcomes of the project. - Ensure monitoring and evaluation methods adhere to established standards and pre-existing programs where relevant. - Develop experimental design, sampling protocols and data collection methodologies relating to the monitoring and evaluation of the fisheries and ecosystem benefits of the temporary mangrove enclosures. - Assist in the training of fisheries observers in collection, management and processing of fisheries catch data. - Oversee the implementation of data collection methods and protocols relating to monitoring fisheries and environmental values and socio-economic indicators of change associated with these fisheries. - Plan and execute specialist field sampling to establish the baseline status of fished and protected ecosystems over time and establish the progress of the project in relation to socio economic and environmental indicators. - Manage the processing and analysis of data and the compilation of written reports and manuscripts for publication. - Assist in the administration and management of funds including the auditing of financials against project outputs and outcomes.
Have you included a Letter of Support from this institution? If not, why not?	Yes

10. Key Project personnel

Please identify the key project personnel on this project, their role and what % of their time they will be working on the project. Please provide 1 page CVs for these staff, or a 1 page job description or Terms of Reference for roles yet to be filled. Please include more rows where necessary. These should match the names and roles in the budget spreadsheet.

Name (First name, surname)	Role	Organisation	% time on project	1 page CV or job description attached*?
Dr Ben Fitzpatrick	Project Leader	Oceanwise Australia	Y1,2 – 20% Y 3 – 30%	Yes
Mr Adam Miller	Co Project Leader	Yayasan Planet Indonesia	10%	Yes
Ms. Novia Sagita	Project Manager	Yayasan Planet Indonesia	10%	Yes
Dr Raquel Amador	Managing Scientist	Yayasan Planet Indonesia	10%	Yes
Ms Emily Twiggs	Geospatial Analyst	Oceanwise Australia	20%	Yes
Ms Michaela Pleitner	Research Scientist	Oceanwise Australia	20%	Yes
*If you cannot provide a CV, please explain why not.				

11. 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?

(Max 300 words)

Currently, over 2.6 billion people on earth rely on fisheries as a primary source of protein and economic income. Moreover, 97% of the world's fisheries reside in developing countries. It is imperative not only for the conservation of marine species, but also for food security, coastal protection and poverty alleviation that effective management strategies be implemented in coastal mangrove areas.

In West Kalimantan, Indonesia nearly all conservation efforts and funding resources are funneled towards rainforest conservation efforts. Currently, almost no efforts are being made to conserve coastal areas, empower rural coastal communities, or develop new management systems that restore fisheries while improving mangrove forest management. In West Kalimantan, Planet Indonesia has pioneered a community-based approach to drive the adoption of temporary mangrove reserves.

The area has suffered severe coastal degradation and mangrove deforestation. This area is also home to two of the world's rarest estuary dolphin species, the Irrawaddy river dolphin and the Indo-Humpback dolphin which are bi-catch of unsustainable fishing practices. Moreover, in 2017, *Bruguiera hainessi*, a highly endangered mangrove species thought only to exist in Singapore and Papua New Guinea was found to exist in our focus area as to the Bornean endemic Endangered Proboscis Monkey.

This biodiversity is paired with the 3rd highest level of illiteracy rates found within these coastal communities in the entirety of Indonesia, and the district with the highest level of poverty in West Kalimantan, Indonesia. It is imperative that community-led solutions be engaged to combine sustainable development with mangrove and fisheries conservation, or this area will disappear forever. Expanding our program of establishing mangrove conservation and fisheries management elsewhere in Indonesia will benefit from the insights and refinements gained from this program.

12a. Biodiversity Conventions, Treaties and Agreements

Your project must support the objectives 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 and how. Note: projects supporting more than one will not achieve a higher score.

Convention On Biological Diversity (CBD)	Yes
Nagoya Protocol on Access and Benefit Sharing (ABS)	No
International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)	No
Convention on International Trade in Endangered Species (CITES)	No

12b. Biodiversity Conventions

Please detail how your project will contribute to the objectives of the agreement(s) your project is targeting. You should refer to Articles or Programmes of Work here. Note: No additional significance will be ascribed for projects that report contributions to more than one agreement

(Max 500 words)

Our program is strongly connected to the current Convention on Biological Diversity (CBD) goals and Aichi Biodiversity Targets.

To address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society: our program embraces a “bottom-up” approach, we provide community-based services in three sectors (business, education, and healthcare) in exchange for the protection and restoration of ecosystems. We create bi-lateral partnerships at the village level to help communities overcome poverty while engaging in new conservation and resource management plans, directly addressing Aichi targets relating to increased awareness and positive incentives for biodiversity conservation.

To reduce the direct pressures on biodiversity and promote sustainable use: It is imperative that community-led solutions be engaged that combine sustainable development with conservation. Our mangrove reserves program creates incentives for communities to more sustainably manage mangrove forests through restoring fish habitat and crab, shrimp, and estuary fisheries - the main livelihood for these coastal communities. We incentivize community adoption of temporary mangrove reserves [TMRS], mangrove and shrimp pond reforestation. This directly addresses Aichi targets relating to the legal sustainable management of fished stocks and arresting and reversing the rates of mangrove habitat clearing and degradation to enhance ecosystem resilience, adaptation to climate change, coastal erosion and carbon stocks.

To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity: This grant will be a stepping stone to assist progressing implementation of our Temporary Mangrove Closure model in 1 village, and expand to 4 neighboring villages. Once communities become familiar with the model, we will move into a greater design for a Locally Managed Marine Area (LMMA). This will be managed locally with oversight from the Department of Forestry and Fisheries (Dinas Kehutanan and Dinas Perikanan), helping to meet Aichi targets relating to the increased protection and effective management of at least 10% of marine areas at a landscape scale.

Enhance the benefits to all from biodiversity and ecosystem services: Our community-based services (business, education and healthcare) target gender inclusion and reduce inequalities in rural communities. We aim that 60% of our beneficiaries for our business services will be women. Our literacy program primarily targets women and youth, with an aim of 70% of target beneficiaries being women. Our healthcare program (family planning and women’s hygiene/sanitation program) aim to reach 300 women. Our work is centered on catalyzing fair and equitable development for rural communities helping to achieve Aichi targets relating to addressing health, sustainable livelihoods and gender imbalance and inclusion in solving these biodiversity issues.

Enhance implementation through participatory planning, knowledge management and capacity building: our program also helps communities own every step of the planning, implementation, and managing of initiatives, as we understand this to be essential for long-lasting, sustainable change. Our conservation compact approach is a bi-lateral relationship between our organization and a village covering all aspects of financial planning, management and transparency of small micro-enterprises and cooperatives. This incorporates Aichi targets of ‘integrating local development and poverty reduction strategies and planning processes’ into solving biodiversity issues.

12c. Is any liaison proposed with the CBD / ABS / ITPGRFA / CITES focal point in the host country?

Y Yes No if yes, please give details:

We have had dialogue with the National CBD focal point for Indonesia and they are aware of our work program. We have not had an opportunity to discuss this current proposed project with them however we will contact the offices with an update on our current works and proactive in ensuring their involvement as our work develops.

12d. Global Goals for Sustainable Development (SDGs)

Please detail how your project will contribute to the Global Goals for Sustainable Development (SDGs).

(Max 250 words)

Planet Indonesia was selected as one of the winners of the [United Nation's Development Program Equator Prize](#) in 2017. This prize is awarded to organizations who have innovative models for catalysing nature-based solutions to reach the UNDP global sustainable development goals. Our current work is strongly linked with current Global Goals for Sustainable Development:

- No poverty: our communal business approach (e.g. Small micro-enterprises) provides entrepreneurship, training and business investments to low-income communities living in tandem with biologically important ecosystems.
- Good Health and Wellbeing: Our family planning and women's hygiene program empowers women and families to live happy healthier lives that are rooted in sustainable resource management.
- Gender Equality: Our program reaches nearly 3000 households currently and over 65% of our total beneficiaries are women. From revitalizing traditional art to empowering women farmers, gender equality is at the heart of our model. In 2015 we won an award through the [UN Women's Project Inspire](#) competition for combing conservation and gender inclusion work.
- Climate Action: We work closely to provide community-based services to communities in 3 sectors (business, education, and health) in exchange for protecting and restoring ecosystems. Our work is centred on both climate change mitigation and adaptation through catalysing fair and equitable development for rural communities.
- Life below water: Our mangrove reserves program creates incentives for communities to more sustainably manage mangrove forests through restoring crab, shrimp, and estuary fisheries which are the lifeline and main livelihood for coastal communities.

13. Methodology

Describe the methods and approach you will use to achieve your intended Outcome and Impact. Provide information on how you will undertake the work (materials and methods) and how you will manage the work (roles and responsibilities, project management tools etc.).

(Max 500 words – this may be a repeat from Stage 1, but you may update or refine as necessary. Tracked changes are **not** required.)

Our organization is unique in that we combine community-based services with conservation management plans [through conservation compacts](#). Through these compacts we administer services in three sectors: education, business, and women's health services in exchange for protecting and restoring critical ecosystems.

Business: We facilitate green prosperity through (i) *identifying and intensifying* local livelihoods and sources of income, (ii) *transferring* assets and providing production training to launch communal businesses, (iii) *building community capital* by creating community-led savings and loans programs, and (iv) *providing mentoring and life skills* coaching to promote long-term sustainable development.

Education: Our Education services are provided through our literacy program. Villagers who sign-up to join a conservation compact may opt-in to receive literacy training. This service targets women and youth of households that have agreed to join our conservation compacts. We provide 3 different year-long courses based on the level of the individual wishing to join our program. All courses are Indonesian government certified and receive a government recognized certification for improved job/market access.

Healthcare: Our work focuses on women in health awareness, hygiene and sanitation, and family planning. We work to empower women to be local leaders by providing pathways to better healthcare and education while engaging women in resource management decisions.

Protecting & Restoring Ecosystems: These three services are chosen by communities, not forced upon them. In our project area purposed to the Darwin Initiative we administer these three services in exchange for the adoption of temporary mangrove reserves [TMRS] to restore fisheries and in exchange for mangrove and shrimp pond reforestation.

TMRs are an effective management strategy for communities which rely on marine populations as a primary sustaining resource. Under this strategy small sections of coastal areas are temporarily closed (varying from 3-8 months), allowing for fish stocks to replenish before opening for harvest once again. Utilizing ecological principles and the fast-rate-of-return of marine populations, our temporary closure system helps communities recognize the value of preserving coastal habitats that are necessary for marine population persistence.

It has been shown elsewhere that the use of temporary enclosures decreases the amount of effort required and increases the overall size and weight of catch, particularly true for rapidly growing species such as molluscs and crustaceans. Since many fisheries are seasonal such as this one, the timing of temporary closures can be aligned to have minimal disruption and introduced outside peak fishing season. Additional benefits include a greater sense of stewardship over locally managed marine resources and increased awareness of the benefit of permanent closures specifically and fisheries management generally.

Ultimately, TMRs are positioned and designed to be the first step to incentivize villagers transition to create Locally Managed Marine Area Plans consisting of spatial planning, fisheries regulations and maintenance of ecological values (LMMAs). Therefore, as communities receive return-on-investment from temporary closures, these areas will ideally transition into permanent reserves acting as habitat and source populations for surrounding fisheries. Ultimately this will assist local government with introducing comprehensive sustainable fisheries management frameworks that incorporate aspects of licencing, monitoring, compliance, enforcement and regulation.

14. Change Expected

Detail the expected changes 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). Please describe the changes for biodiversity and for people in developing countries, and how they are linked. When talking about people, please remember to give details of who will benefit, and the number of beneficiaries expected. The number of communities is insufficient detail – number of households should be the largest unit used. If possible, indicate the number of women who will be impacted.

(Max 500 words)

The main goal of our project is to improve community-led mangrove forest management in West Kalimantan, through integrating community-based services to reduce socio-economic inequalities. We create bi-lateral partnerships at the village level to help communities overcome the hardships of poverty while engaging them in new conservation and resource management plans. The partnerships are signed agreements, which outline services provided to village X, and the management plan created around ecosystem Y.

To reduce socio-economic inequalities in the short term, this project intends to increase fishery and crab harvest rates for fishers; enroll 600 women and youth in the literacy program with >60% graduation rate; and, provide our healthcare program (family planning and women's hygiene/sanitation program) to 300 women. 40 individuals (10 per team over 4 teams) of the forest and marine patrol unit and fisheries observers trained by Planet Indonesia will participate in aspects of monitoring, patrolling, conducting fisheries surveys and environmental impact research and participate in mangrove reforestation activities preparing them for longer term responsibilities.

To preserve ecosystem biodiversity, we expect to increase protection of 10000 ha of mangrove forest through the TMR system which will increase forest cover through natural regeneration in closure sites, and through mangrove reforestation on degraded lands and shrimp aquaculture ponds.

We will also conduct research in areas of conservation concern due to the presence of conservation priority, threatened and endangered species including, the Irrawaddy river dolphin and the Indo-Humpback dolphin the Bornean endemic Endangered Proboscis Monkey and the highly endangered mangrove *Bruguiera hainessi*. Impact studies will be conducted in order to access how the TMR system impacts on biodiversity.

In a long-term we expect to improve community-based mangrove management and resource governance. A Locally Managed Marine Area (LMMA) will be created between our 5 target villages, which will be of higher importance to socio-economic and biodiversity conservation. Ultimately, this system gives management rights back to local communities, they take ownership over the responsible and sustainable management of their mangrove and fisheries resources and sets up marine management zoning systems for mutual benefit.

We expect that this system will improve food security and stabilize fisheries, reduce climate change impact through reducing emissions of mangrove deforestation, land conversion and protecting coastal communities from coastal erosion and catastrophic storm events. The system will improve opportunities for women and youth to engage in local governance through improved access to healthcare and education opportunities.

We have currently piloted this Temporary Closure model in 1 village and have plans to scale-up to 4 neighboring villages (see Attach 16). After each community is familiar with the temporary closure model, we will move into a greater design for a LMMA at the regional level, with oversight from the Department of Forestry and Fisheries (Dinas Kehutanan and Dinas Perikanan). Before developing a regional management plan, it is imperative that each village be familiar with the TMR system, having piloted it in their own respective fishing areas and realized some of its benefits, which this R24 Darwin grant will enable us to do.

15. Gender

All applicants must consider whether and how their project will contribute to reducing inequality between persons of different gender. Explain how your project will collect gender disaggregated data and what impact your project will have in promoting gender equality.

(Max 300 words)

Our community-based services target gender inclusion and reduce inequalities in communities. Our model was recognized in 2015 with a prestigious UN Women's Project Inspire award. has been extensively refined since. In the context of this project, women are often overlooked in playing a critical role in the management of fisheries including financial management, catch processing and maintaining equipment.

We aim that 60% of the beneficiaries of our services are women. These provide small investments, build a locally-managed savings/loans program, and financial management training for women. Our literacy program targets women and youth, with 70% of beneficiaries being women who gain access to a year-long course with weekly tutoring sessions. Individuals are aggregated between 5 groups depending on an assessment of literacy skills. Finally, our healthcare services primarily target women, as baseline data shows they have limited access to sanitation and hygiene.

Prior to implementation we use a large household survey covering five major aspects: economics, health, literacy, land rights, and engagement in conservation (see Attach 15 Household Survey English.pdf). This collects baseline data across indicators (see logical framework) and repeated on a 3 – 5 yearly basis and tracked through time. Smaller surveys which evaluate the interaction between our programs, how services incentivize conservation, and results from temporary closures are administered yearly.

We use results from these surveys to guide our project implementation and target services. For example, in one of our previous surveys we found that water hygiene and sanitation was a major issue with 62% of women answering rainwater as the primary household water source, women are usually the ones fetching the water (72%), and only 11% buy bottled water (89% comes from rain water), with 94% of women boiling the water. As a result, our program helped address this gender imbalance and improve access to water.

16. Exit strategy

State whether or not the project will reach a stable and sustainable end point. If the project is not discrete, but is part of a progressive approach, give details of the exit strategy and show how relevant activities will be continued to secure the benefits from the project. Where individuals receive advanced training, for example, what will happen should that individual leave?

(Max 200 words)

Our project prepares the community and its members to work towards sustainable management of mangrove and fisheries. We achieve this in many ways. We work with every community group to setup, administer and manage a revolving fund. This money is built by each member returning a small amount of their profit (1-5%) to a central community managed savings/loans program. This money is then used to (i) cover damages to the group, (ii) allow for improved market access for villagers, and (iii) cover operational costs *after the life of a program*.

As of December 2017, our pilot village has saved USD \$2650 in a year period. This provides a perfect exit strategy, as these funds can continue our programs after the life of a grant. For example, we advise communities to use these funds to support future patrol units and allow for local business growth within a village. We also train individuals and involve them in all aspects of conservation management, research and operations. Therefore, our exit strategy is centred on strengthening the communal business group (SMEs) that we help facilitate to create, to continue a program after the life of a grant.

17a. Harmonisation

Is this a new initiative or a development of existing work (funded through any source)? Please give details

(Max 200 words)

The Darwin Initiative will fund a project that fulfils a genuine and direct demand from the local community ensuring a high level of harmonization from the outset. At a local level we have conducted a pilot test in the Nibung village in West Kalimantan, Indonesia in 2016-2017. In 2016 we launched this approach and have enrolled 220 fishermen in the TMR system, 200 women and children in our literacy program and protected 5000 ha of mangrove forest. In 2017 four neighbouring villages have requested involvement in the program. Interestingly, this demand came before results from our temporary closures evaluation were complete, due to the many unintended benefits. Our program holistically empowers communities, restoring fishing and land rights, and helping seasonal fisheries management.

Further harmonization is achieved by integrating this projects association with government, NGO's and other organizations programs such as the [Department of Fisheries](#), [World Resource Institute Global Forest Watch](#), [George Washington University International Development Department](#) and [Blue Ventures](#) sustainable fisheries program. We publish scientific journals and engage popular media with specific and established reputation for representing our work positively. We employ strategies across all project levels to optimize harmonisation with our partners, for our organization and the Darwin Initiative.

17b. Are you aware of any other individuals/organisations/projects carrying out or applying for funding for similar work? Yes

If yes, please give details explaining similarities and differences. Explain how your work will be additional to this work and what attempt have been/will be made to co-operate with and learn lessons from such work for mutual benefits.

In 2017, project partners began coordinating with Blue Ventures. Blue Ventures has been helping Planet Indonesia strengthen our monitoring and evaluation strategy, as well as looking at how community-health can catalyse conservation. They visited our project site in 2017 to help train our staff and share how their model is working in Africa. We are currently synchronizing our monitoring and evaluation strategies so that results can be compared between Africa and Southeast Asia, using the temporary marine reserve system.

Planet Indonesia slightly differs from their approach as we place a heavy emphasis on both business development and training, as well as literacy and community-services to catalyse conservation. We are also sharing how our model is working, and BV has shown a particular interest in how village-level savings/loans programs can enhance the longevity of programs even after a grant or project period. We are very focused on optimizing benefit to this project from others work in our field, in turn undertaking our work and providing it to compliment other projects and ensuring overall project outcomes synergistically improve international conventions and agreements.

18. Ethics

Outline your approach to meeting the Darwin Initiative's key principles for research ethics as outlined in the [Guidance](#).

(Max 300 words)

We adhere to the highest ethical standards. Work is undertaken under the Planet Indonesia non-profit status with all sustainable development activities targeted at individuals for their financial development and gain. All financial revenue generated by sustainable development

activities are retained by the individuals and communities they are a part of, with no profit sharing or similar defining our bilateral agreements.

Our Approach is driven by local community demand with our pilot project operating since 2016, demonstrating significant benefit to the community including strengthening their traditional fishing rights through management tenure and improving the literacy, health, business and financial well-being of this community.

Implementing Temporary Mangrove Reserves is a direct response to fisher's periodic seasonal fishing activities. This approach was arrived at from direct community consultation and is reflected in high subscription rates of 220 local fishers to the management plan. This formalizes traditional fishing rights and informs the management approach taken.

All research is conducted under principals of prior informed consent and adherence to strict privacy and confidentiality. Health and education initiatives are implemented according to best practice standards in the US. Results are subject to strictest scientific method and practice. We have built our reputation on objective, impartial science and ensuring results are clearly verifiable and transparent regardless if they are positive, negative or indifferent to objectives.

Monitoring and evaluation is conducted closely with local villages who are involved in the data collection process. Fishery dependent data collected at landing sites is sourced from our local data managers, who are fishermen and women who have received training on data collection. Indonesian Department of Research and Technology (RISTEK) is always consulted prior to the commencement of any work to obtain correct permits and permits to evaluate and monitor outcome of this project are not required.

19. Raising awareness of the potential worth of biodiversity

If your project contains an element of communications, knowledge sharing and/or dissemination please provide a description of your intended audience, how you intend to engage them, what the expected products/materials will be and what you expect to achieve as a result. For example, are you expecting to directly influence policy in your host country or is your project a community advocacy project to support better management of biodiversity?

(Max 300 words)

We use contemporary communication tools such as social networks, a blog and popular media platforms to share information about our programmes with a global audience. We work closely with [Mongabay Indonesia](#) publishing articles to raise awareness on the wild bird trade. We publish in peer-reviewed journals about wildlife trade, biodiversity loss and innovative strategies to protect wildlife. We plan to work closely with the Jakarta Globe and Jakarta Post to further influence the public and the Indonesian government on conservation. At the national level, our wildlife crime investigation teams collect intelligence and work closely with local communities and relevant government agencies to make law enforcement more effective and take action against wildlife crime.

We work with local high school and University students through our Training Camps to build capacity and leadership skills in the next generation. Every year our staff work in local high schools through our 10-week training program to provide basic environmental education and leadership training (see Attach.17). We work with students from the Kubu Raya district, but we are expanding this program to schools in areas such as Gunung Niut and Sungai Nibung. We have created a climate change fellowship program where students come from across Western Borneo to our training camps. These camps hinge upon building the next generation of environmental leaders by integrating leadership training into climate change adaptability.

We expect to support better management of biodiversity in the region of Sungai Nibung but also directly influence policy towards the creation of a Locally Managed Marine Area (LMMA), which will be of higher importance to both socio-economic and biodiversity conservation aspects in the local community. Ultimately, this system gives management rights back to local communities, and sets up systems (no harvest zones, periodic closures, and permanent-open fishing sites) for mutual benefit.

20. Capacity building

If your project will support capacity building at institutional or individual levels, please provide details of what form this will take and how this capacity will be secured for the future.

(Max 300 words)

Our [conservation compact](#) approach is a bi-lateral relationship between our organization and a village. Our main pathway to administer these services, are through village level Small-Micro Enterprises (SME), or cooperatives. Members who join this village-level institution, receive business, education, and health services in exchange for adopting new resource management plans, such as a temporary closure model. Therefore, our model hinges on capacity building. Our staff strengthens the SME so that it acts as its own institution. We help communities hold hearings, elect a president, secretary and treasurer, and create standard operating procedures related to financial management and transparency. This SME is the vector that we administer services through, and the vector in which conservation management plans, such as temporary closures, are implemented. Strengthening the institutional capacity of this SME is also the central point of our exit strategy, as these village institutions continue implementing projects even after the life of a grant or project period.

This model was first piloted on a small scale in the village of Pulau Limbung. The main goal of this project was to create women-led businesses while working with women to reforest nearly 2000 ha of degraded land surrounding a small protected forest (~8000 ha). We worked with 150 households and started two organic chicken farming enterprises, and one organic duck egg farming. These women helped us plant nearly 2000 seedlings on degraded lands in the buffer zone of a small protected forest. After two years, this project has reached its goals, the community – businesses are self-sustained, and nearly 2500 seedlings have been planted. This is a prime example of how our Conservation Compact is a *shared solution* between our organization and a community that improves human well-being while catalysing holistic conservation.

21. Access to project information

Please describe the project's open access plan and detail any specific funds you are seeking from Darwin to fund this.

(Max 250 words)

We adhere to principals of open access in all our work. We publish in Open Access Journals such as PLoS1 ensuring universal access to our research papers and findings. We agree to all datasets, reports and articles being made available to R24 Guidance 12 users. There are some possible exceptions to complete and open access – where data might relate to current proceedings against illegal or criminal activities or sensitive personal records that might breach confidentiality agreements, or particularly rare or endangered populations of plants and animals where it would be wise to disclose such information in general terms only or to trusted sectors only.

Otherwise we firmly believe in the benefits of openly sharing research data products and reports describing the effectiveness of our socio-economic programs, temporary mangrove enclosures for improving livelihoods, fisheries and ecosystem health. We will make these available for dissemination on our website and lodged with Darwin Initiative collections. Reference to these materials will be made in press releases and social media notifying individuals they can request copies. All spatially explicit datasets such as layers describing

mangrove cover and other ecosystem values, locations of rare endangered protected or endemic species, marine protection zones etc will be made available to research, planning and management stakeholders. We are highly motivated to sharing our project outputs with local villages and international organizations alike such as the IUCN, UNDP and UNEP, FAO, WRI, where members would best stand to benefit and our impact can be greatest.

Project Monitoring and Evaluation

Measuring Impact

22. Logical Framework

Darwin projects will be required to report against their progress towards their expected Outputs and Outcome if funded. 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.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Impact: Achieving Sustainable mangrove fisheries through the Fair, equitable and sustainable development of low-income coastal communities of West Kalimantan, Indonesia.</p> <p>(Max 30 words)</p>			
<p>Outcome: (Max 30 words) Successful introduction of community-led mangrove fisheries management plans in West Kalimantan, introducing temporary mangrove reserves, rehabilitating degraded areas and introducing patrols, incentivized through the provision of community-based services that improve socio-economic inequalities.</p>	<p>By 31st March 2021: Successful achievement of our overall project outcome will be indicated by successful completion of several indicators. It makes sense that these indicators are synthesized from attainment of project outputs as outlined below.</p> <p>0.1 Results from our monitoring and evaluation program pertaining to key outputs (below) will be obtained and synthesized into a report. The report will outline the major findings of project outcomes and successes in three main areas:</p> <p>0.2 Establishing Local Marine Management plans including the establishment of a community-based management team to implement the plans upon project completion. Indicated by agreements with co-operatives, size and frequency of patrols, data describing park management including installation of infrastructure, the support of local</p>	<p>0.1 Local marine management plan drafted and signed up to by local SME co-operatives. 0.2 Fishery/crab harvest rate from TMR zones and adjacent areas fished all year round by fishermen enrolled in the program. 0.3 increase in mangrove cover and biodiversity from baseline surveys to post protection and revegetation surveys. 0.4 results of acquisition and retention rate in 3 programs: Cooperatives/SMEs, literacy program, and women's healthcare. 0.5 Records quantifying graduation rate from literacy program 0.6 Results of socio-economic surveys pre, mid, and post intervention and the impact of our project. 0.7 Amount of funds in community-owned savings/loans program. 0.8 Annual data reports will be compiled with a preliminary summary of data collected for this monitoring and evaluation undertaken and preliminary findings.</p>	<ul style="list-style-type: none"> - local communities are open to new resource management plans in the face of decreasing fisheries and income - local communities are open to reforestation efforts on degraded mangrove habitats. - local women, youth and men are open to business, literacy health care and conservation programs - no natural disasters such as storms, droughts or climate change related stochastic events impact on or destroy coastal areas (e.g. tsunami, etc)

	<p>fishers indicated by their enrolment in the SME.</p> <p>0.3 Improved economic and ecological fisheries sustainability for main target species and repair and restoration of critical fish habitats. Indicated by results from fisheries CPUE surveys, results from market surveys of price and abundance of fish caught and fisheries independent surveys of target and non-target fish assemblages including species abundance, biomass and richness.</p> <p>0.4 Benefits to village socio-economic security and gender equality derived from the literacy, healthcare, and small micro enterprise programs. Indicated by improvements of key indicators measured with household surveys, including but not limited to</p>		
<p>Outputs: 1. Mangrove forests protected under temporary mangrove reserve (TMR) system SD Goal: Climate Action</p>	<p>1.1 By 31st June 2020, 15,000 ha of mangrove forest will be protected in the TMR system, closing these areas off to extractive fishing for 3 months of the year each year from their establishment. Each TMR will be delineated by physical boundary markers and signage, with high definition maps of each Temporary Mangrove Reserve created in GIS and circulated.</p> <p>1.2 By 31st June 2019, 3 Forest patrol units have been created and actively help undertake baseline visitation surveys to help identify candidate reserves, manage reserve boundaries, patrol current, proposed and new TMR's</p>	<p>Several redundant methods will be deployed to produce relevant verifiable data as described below:</p> <p>1.1 GIS spatial mapping of target zones before during and after zoning and areas rehabilitated will be completed.</p> <p>1.2 Enrolment in forest patrol units reaches the goal of 12 individuals.</p> <p>1.3 Records of all patrols. Records of visitation within reserves recording number of people, what activities they are undertaking in the reserve. Installation of infrastructure such as signage and markers. Data include</p>	<ul style="list-style-type: none"> - no stochastic events destroy mangrove forests -government does not give land rights away to logging / pulp companies - community patrol units are honest and fair in local law enforcement - Most fishers abide by the closure with little to no infringements.

	<p>weekly and record patrol hours and other compliance and monitoring activities.</p> <p>1.3 Impact studies will be conducted to access how the TMR system and mangrove replantings impacts on biodiversity prior to and after each of two planned closures. Baited remote underwater video will be conducted in the waterways before and after same closures at defined locations and abundance and distribution of target and non-target species quantified.</p> <p>1.4 Incidental sightings of rare endemic and protected species including Irrawaddy river dolphin and the Indo-Humpback dolphin the Bornean endemic Endangered Proboscis Monkey and the highly endangered mangrove <i>Bruguiera hainessi</i>. will be recorded in pre-defined datasheets during fishing activity and marine patrols. Information on these species will be compiled on leaflets and circulated and placed on signage in frequented areas.</p>	<p>names of personnel, time, location, photo data and other supplementary evidence.</p> <p>1.4 Minutes from community meetings defining reserve boundaries before and after each implementation.</p> <p>1.5 results of biodiversity assessments undertaken at TMR sites and revegetation plots including list of species, their abundance and biomass, mangrove canopy cover, density and health. Crab and Demersal fish assemblage data including species, abundance, biomass, assemblage composition and related indices.</p> <p>1.6 Records of incidental sightings from fishers, patrol rangers, public, project related personnel from predefined datasheets.</p> <p>By 31st of March 2021 a report will be compiled summarizing this monitoring and evaluation undertaken.</p>	
<p>2. Increased harvest size by fisherman enrolled in program in TMRs zones SD Goal: Life Below Water</p>	<p>2.1 By 31st March 2021, 25-40% increase in crab and fish harvest rates in TMR zones over two annual closures. Harvest rates by fishers from within TMR zones will increase by 15% or greater over a whole year when compared to the same location prior to protection and adjacent control locations that are fished all year round. The main metrics being biomass, length, fishing effort and number of fish harvested, and total value of fish sold.</p>	<p>Complimentary datasets will be collected to assist in the confirmation of benefits including fishers catch reporting, fish market sale point and fisheries independent data to ensure redundancy in data and secure adequate verifiable information as described below:</p> <p>2.1 Collection of baseline data of fishers' harvest rates pre and post intervention each of 2 years.</p>	<p>- outside fisherman do not enter area during closure destroying population (note: role of patrol teams to protect area during closure)</p> <p>- after area is opened, there is not an influx of fishermen from other areas causing harvest rates to decrease because of overfishing</p>

		<p>2.2 Records of crabs/fish sold to markets consistently recorded all year round.</p> <p>2.3. Catch per unit effort data gathered from fishers participating in SME including data on size biomass, location effort.</p> <p>2.4 Fisheries independent data resulting from stereo-baited underwater video surveys within and adjacent TMR's showing changes in fish assemblage structure, abundance, biomass and species composition before and after 2 closures.</p> <p>By 31st of March 2021 a report will be compiled summarizing this monitoring and evaluation undertaken.</p>	
<p>3. Degraded forest patches and shrimp ponds enhanced and restored with mangrove plantings SD Goal: Life On Land</p>	<p>By 31st March 2021,</p> <p>3.1 150 ha of degraded lands will have been replanted at a density of 250 individual mangroves per hectare at a rate of 50 hectares per year</p> <p>3.2 120 ha of degraded forest patches actively protected, restored and replanted to a density of at a density of 250 individual mangroves per hectare or 50% canopy cover (40 hectares per year 2018-21)</p> <p>3.3 At least 30 ha of active aquaculture ponds will receive supplemental planting with 10 fishers or more participating with an increase to 250 individual mangroves per hectare for replanted areas (10 hectares per year 2018-21)</p>	<p>Several redundant methods will be deployed to produce relevant verifiable data as described below:</p> <p>3.1 and 3.2 Drone and/or ground-based GIS spatial mapping of reforestation zone with estimates of %canopy cover, trees per hectare, tree health surveys prior to replanting and management interventions and again in December 2020 nearing the end of the project period.</p> <p>3.3 Total number of seedlings planted and seedling survival rate by plot surveys will be counted and total change in canopy cover calculated, and the effort needed to achieve each hectare of rehabilitated areas.</p>	<ul style="list-style-type: none"> - communities are open to reforestation on degraded lands - communities allow for enhancement plantings on aquaculture ponds/areas - stochastic environmental events do not destroy reforestation areas / increase seedling mortality

	<p>3.4 a total of 35,000 mangrove seedlings planted with 5000 in the first year, 10,000 in the second year and 20,000 in the final period before the end of the project life.</p> <p>3.5 Biodiversity has increased within reforested mangrove areas doubling the abundance and diversity of invertebrate and vertebrate species recorded prior to replanting program.</p>	<p>3.4 Number of fishers who allow enhancement plantings on shrimp aquaculture ponds will be collated together with metrics on the total area of their ponds, the amount of area replanted with mangroves and the effort needed to achieve each hectare of rehabilitated areas.</p> <p>3.5 Abundance and species diversity assessment of the biodiversity at multiple revegetation plots and nearby control plots measured before during and at the end of the project will be measured using visual surveys in quadrats and along transects.</p> <p>By 31st of March 2021 a report will be compiled summarizing this monitoring and evaluation undertaken.</p>	
<p>4. Small micro-enterprises (SMEs) are established to economically empower local fisherman while engaging them in the TMR system SD Goal: No Poverty</p>	<p>By 31st March 2021:</p> <p>4.1 600 fishermen will be enrolled in the program through Small Micro-enterprises (SMES) / Cooperatives. Each year Between 2018 – 2021, for three years, 200 beneficiaries join the program through Cooperatives/SMEs (600 people during the project)</p> <p>4.2 Funds in the savings/loans program increases by 25% each year for the first three years (e.g community contribution to community-run safety fund)</p>	<p>Several redundant methods will be deployed to produce relevant verifiable data as described below:</p> <p>4.1 Collection of baseline data pre and post intervention quantifying each fishers' business activity including income from fish sales, effort for catching fish and costs associated with fishing.</p> <p>4.2 Fisher surveys measuring the impact of the TMC including their opinion of the impact of the TMC on their business.</p> <p>4.3 Enrolment and retainment rate in communal business group.</p> <p>4.4 Amount of funds in savings/loans program measured on monthly basis</p>	<ul style="list-style-type: none"> - communities are open to temporary mangrove reserves system - communities are active in business group and open to new financial management methods

		By 31 st of March 2021 a report will be compiled summarizing this monitoring and evaluation undertaken.	
<p>5. Literacy program continues running to improve capacity and job market access for women and youth. Only women/children whose household joins the TMR system have access to this service, creating strong incentives for adopting new rss mngt. SD Goal: Reducing Inequalities & Gender Equality</p>	<p>5.1 Each year for three years, 200 women/children enrol in literacy program and receive access to this program and; 5.2 60% or more graduate (600 people during the project)</p>	<p>Several redundant methods will be deployed to produce relevant verifiable data as described below:</p> <p>5.1 Enrolment rate in program by women (% and age) and youth (% and age)</p> <p>5.2 Scores on pre and post-test provided to participants before, mid, and after year long course</p> <p>5.3 Individuals (%) that graduate and receive gov't certified certificate</p> <p>5.4 Results from household surveys used to verify benefits of the program.</p> <p>By 31st of March 2021 a report will be compiled summarizing this monitoring and evaluation undertaken.</p>	<ul style="list-style-type: none"> - those enrolled in literacy program remain active in attending sessions - local tutors are impactful and effective - community members remain motivated about the prospects of graduating from program to receive government certified certificate to increase placement in local work force
<p>6. Reducing Inequalities: Family Planning and Health Sanitation program established to improve access for women/youth SD Goal: Good Health and Wellbeing & Gender Equality</p>	<p>6.1 Each year for three years, 100 individuals join program and receive training and access to sanitation & contraceptives (total of 300 people during the project)</p>	<p>Several redundant methods will be deployed to produce relevant verifiable data as described below:</p> <p>6.1 Enrolment rate in program by women (age class)</p> <p>6.2 number of women health ambassadors who will locally lead program</p> <p>6.3 pre and post test data results from program to show increase in knowledge on reproductive health</p> <p>6.4 Long-term monitoring of health indicators (family size, contraceptive</p>	<ul style="list-style-type: none"> - local women acknowledge and are open to new reproductive healthcare services - health ambassadors are active in motivating community members - contraceptives are used correctly

		<p>use, age of first birth, desired age of first birth, etc) through Planet Indonesia's yearly impact survey By 31st of March 2021 a report will be compiled summarizing this monitoring and evaluation undertaken.</p>	
<p>Activities (each activity is numbered according to the Output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)</p> <p>Output 1: Mangrove forests protected under temporary mangrove reserve (TMR) system SD Goal: Climate Action</p> <p>1.1 Initial community socialization and hearing in 4 target villages 1.2 Data and knowledge sharing, bringing previous program beneficiaries to share experience with TMR in new village 1.3 Mangrove forest mapping with communities, building zones for temporary closures, ecosystem assessments. 1.4 Community assessment and patrol unit recruitment 1.5 Patrol unit training and data model set up for recording visitation, incidental sightings and infrastructure. 1.6 Temporary Mangrove Reserve (TMR) closing 1.7 Patrol unit patrolling 1.8 TMR opening 1.9 Meeting, Evaluation and Data Sharing of TMR Closure 1 1.10 TMR Closing II 1.11 Patrol unit patrolling 1.12 TMR Opening 1.13 Meeting, Evaluation and Data Sharing of TMR Closure 2 1.14 Mangrove forest mapping and ecosystem assessments after closures focusing protected and on rehabilitated areas and adjacent control sites. 1.14 Final Report and Data Compilation</p> <p>Output 2: Increased harvest size by fisherman enrolled in program in TMRs zones SD Goal: Life Below Water</p> <p>2.1 Community Socialization and Knowledge sharing of previous program in new target villages 2.2 Baseline fish assemblage surveys - fisheries independent baited underwater video assessments inside and outside TMC pre and post each of two closure periods 2.3 Community Data Collectors Training 2.4 Community Data Collectors Trial Run (Monitoring and Evaluation for Landing Sites and individual fishers) 2.5 Community Data Collectors Evaluation and Training</p>			

- 2.6 Community Data Collectors Implementation (year long with sampling scheme)
- 2.7 Intensive Data Collection on CPUE pre and post each of two closure periods
- 2.8 Final Report and Data Compilation

Output 3: Degraded forest patches and shrimp ponds enhanced and restored with mangrove plantings

SD Goal: Life On Land

- 3.1 Beneficiary Identification
- 3.2 Land, mangroves and biodiversity surveys
- 3.3 Nursery and Seedling Collection
- 3.4 Planting I
- 3.5 Evaluation
- 3.6 Planting II
- 3.7 Mangrove Survival Rate Evaluation and biodiversity surveys
- 3.8 Final Report and Data Compilation

Output 4: Small micro-enterprises (SMEs) are established to economically empower local fisherman while engaging them in the TMR system

SD Goal: No Poverty

- 4.1 Beneficiary Identification and Community Hearing
- 4.2 Baseline Data Collection: Mon/Ev Household Survey I
- 4.3 SME Training I: Background and Administration
- 4.4 SME Training II: Financial and Group Management
- 4.5 SME Training III: Entrepreneurship and New Business Expansion
- 4.6 SME Training IV: Targeted Incubator and Market Access
- 4.7 Monthly Follow-up and data tracking (membership, savings/loans)
- 4.8 Mon/Ev Household Survey II
- 4.9 Final Report and Data Compilation

Output 5: Literacy program continues running to improve capacity and job market access for women and youth. Only women/children whose household joins the TMR system have access to this service, creating strong incentives for adopting new rss mngt.

SD Goal: Reducing Inequalities & Gender Equality

- 5.1 Beneficiary Identification and Community Hearing
- 5.2 Tutor Identification and Training
- 5.3 Class sign-up for 4 levels (packet a, b, c, d)
- 5.4 Pre-test
- 5.4 Year 1 course
- 5.5 Final Exam and Post Test
- 5.6 Pre-test
- 5.7 Year 2 course
- 5.8 Final Exam and Post Test
- 5.9 Pre-test
- 5.10 Year 2 course
- 5.11 Final Exam and Post Test
- 5.12 Final report and Data Compilation

Output 6: Reducing Inequalities: Family Planning and Health Sanitation program established to improve access for women/youth

SD Goal: Good Health and Wellbeing & Gender Equality

- 6.1 Beneficiary and Community Hearing
- 6.2 Coordination with local government clinic and Blue Ventures – Indonesia on Population – Health - Environment Model
- 6.3 Identification and Training of Local Health Ambassadors / Baseline Data Collection
- 6.4 Training I: Family Planning
- 6.5 Evaluation I
- 6.6 Training II: Sanitation and Hygiene
- 6.7 Evaluation II
- 6.8 Training III: Recap, WASH and Family Planning
- 6.9 Evaluation Final
- 6.10 Final Report and Data Compilation

23. Provide a project implementation timetable that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project (starting from Q2 July 2018)

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 shade only the quarters in which an activity will be carried out. The workplan can span multiple pages if necessary.

Activity	No. of months	Year 1			Year 2				Year 3			
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 1: Mangrove forests protected under temporary mangrove reserve (TMR) system SD Goal: Climate Action												
1.1 Initial community socialization and hearing in 4 target villages	1	■										
1.2 Data and knowledge sharing, bringing previous program beneficiaries to share experience with TMR in new village	6	■				■				■		
1.3 Mangrove forest mapping with communities, building zones for temporary closures	6	■	■									
1.4 Community assessment and patrol unit recruitment	4	■	■			■						
1.5 Patrol unit training and data model set up for recording visitation, incidental sightings and infrastructure	3	■	■									
1.6 Temporary Mangrove Reserve (TMR) closing	3		■									
1.7 Patrol unit patrolling	30		■	■	■	■	■	■	■	■	■	■
1.8 TMR opening	1			■								
1.9 Evaluation and Data Sharing of TMR Closure 1	3			■	■	■						
1.10 TMR Closing II	3						■					
1.11 Patrol unit patrolling	18						■	■	■	■	■	■
1.12 TMR Opening	1							■				
1.13 Evaluation and Data Sharing of TMR Closure 2	3							■	■	■		
1.14 Mangrove forest mapping and ecosystem assessments after closures focusing protected and on rehabilitated areas and adjacent control sites	4								■	■		
1.15 Final Report and Data Compilation	4										■	■
Output 2: Increased harvest size by fisherman enrolled in program in TMRs zones SD Goal: Life Below Water												

4.2	Baseline Data Collection : Mon/Ev Household Survey I	3											
4.3	SME Training I: Background and Administration	3											
4.4	SME Training II: Financial and Group Management	3											
4.5	SME Training III: Entrepreneurship and New Business Expansion	3											
4.6	SME Training IV: Targeted Incubator and Market Access	3											
4.7	Monthly Follow-up and data tracking (membership, savings/loans)	27											
4.8	Mon/Ev Household Survey II	6											
4.9	Final Report and Data Compilation	4											
Output 5	Output 5: Literacy program continues running to improve capacity and job market access for women and youth. Only women/children whose household joins the TMR system have access to this service, creating strong incentives for adopting new rss mngt.												
5.1	Beneficiary Identification and Community Hearing	6											
5.2	Tutor Identification and Training	3											
5.3	Class sign-up for 4 levels (packet Illiterate, A, B, C)	33											
5.4	Packet Illiterate, A, B, C – 1-year course	12											
5.5	Packet A, B,C Evaluation : First/Mid/Final – 1 year course	3											
5.6	Packet Illiterate, A, B, C – 2 year course	12											
5.7	Packet A, B,C Evaluation : First/Mid/Final – 2 year course	3											
5.8	Final report and Data Compilation	5											
Output 6	Output 6: Reducing Inequalities: Family Planning and Health Sanitation program established to improve access for women/youth SD Goal: Good Health and Wellbeing & Gender Equality												
6.1	Beneficiary and Community Hearing	6											
6.2	Coordination with local government clinic and Blue Ventures – Indonesia on Population – Health - Environment Model	6											
6.3	Identification and Training of Local Health Ambassadors / Baseline Data Collection	6											
6.4	Training I : Family Planning	6											

6.5	Evaluation I	3											
6.6	Training II: Sanitation and Hygiene	6											
6.7	Evaluation II	3											
6.8	Training III: Recap, WASH and Family Planning	6											
6.9	Evaluation Final	3											
6.10	Final Report and Data Compilation	4											

24. Project based monitoring and evaluation (M&E)

Describe, referring to the Indicators above, 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.

(Max 500 words)

Community-based Indicators:

To track community-level indicators Planet Indonesia, in partnership with George Washington University in International Development, created a household survey to collect baseline data (see Attach. 15). This survey collects data on indicators across 4 major areas: economics (e.g. income, access to savings/loans), health (access to family planning, sanitation methods, water access), education (current level of education, participation in literacy program, etc), environment (land ownership, pesticide use, fishing equipment used, boat ownership, etc). We use a (M)BACI design to track indicators before and after program intervention (on a 3-5 year timeframe), between treatment and controls and multiple communities (e.g. households who sign up for a conservation compact and those that do not).

Fishery Dependent Monitoring and Evaluation:

We collect fishery dependent data at landing sites also using a (M)BACI design. Data is collected 30 days intensive prior to a closure, and 30 days intensive post-closure opening. We also collect data (3 days a week) throughout the year. Landing site data is collected on: fishermen name, location, species caught, weight, length, and price. This is used to calculate Catch per unit effort. We also have a small subset of fishermen recording the same data in daily logbooks. This is used to compare to landing site data, to quantify CPUE before and after closures, between treatment and control at different sites.

Fishery Independent Monitoring and Evaluation:

We deploy non-destructive sampling methods that approximate fishing methods employed by fishers to assess target assemblages. We deploy Baited remote stereo video to assess the structure of fish assemblages and measure relative abundance (MaxN), biomass, average size and sex (where visible) of all target and non-target species. Sites within and adjacent reserves are sampled, and data used to assess the health of the population of target fish stocks and associated ecosystem. We have precedent studying the impact of No-take shark sanctuaries on fish assemblages and fishers' behaviour in Indonesia (Flora-Jaiteh, 2016)

Mangrove Forest Integrity Monitoring and Evaluation:

World Resource Institute has created the Global Forest Watch program that is updated daily in Indonesia. This open source free data set allows us to analyse forest disturbance down to a 30x30meter accuracy with GLAD alerts. It also allows us to track forest loss and forest gain through time. Utilizing the BACI design, we track forest disturbance before, during after a temporary closure, and between closure sites and non-closure sites within the 10,000-ha protected forest. We compliment this course data with Drone based surveys of mangroves at revegetated plots and healthy mangrove sites. We do baseline surveys of multiple forest plots before and after replanting and at control sites. During these surveys we also assess biodiversity associated with mangroves including abundance and biomass of molluscs, crustaceans and other key groups of species indicative of mangroves role as habitat. We also assess mangrove health along sets of transects inside and outside of revegetation trial plots including measures of density, canopy cover, leaf health, flowers, fruits, herbivory impacts, death and leaf senescence and more.

Number of days planned for M&E	
Total project budget for M&E	£155,700
Percentage of total project budget set aside for M&E	25% of total Project funds

Funding and Budget

Please complete the separate Excel spreadsheet which provides the Budget for this application. Some of the questions earlier and below refer to the information in this spreadsheet. You should also ensure you have read the '[Finance for Darwin and Illegal Wildlife Trade Challenge Fund](#)' document and considered the implications of payment points for cashflow purposes.

NB: The Darwin Initiative cannot agree any increase in grants once awarded.

25. Value for Money

Please explain how you worked out your budget and how you will provide value for money through managing a cost effective and efficient project. You should also discuss any significant assumptions you have made when working out your budget.

(max 300 words)

Our project budget is based on our previous experience in implementing this project to date with some differences. Since this is not a new project, but rather we are in the process of scaling-up our impact through funds provided by the Darwin Initiative, the budget was created based on previous costs-incurred. This covers aspects of setting up education, health and business programs, temporary mangrove reserves, conducting patrols and quantifying catch. Some additional elements include setting up the nursery for raising seedlings which we have a precedent for through our work establishing community-based rainforest replanting. Similarly, with the ecosystem monitoring of fish assemblages and biodiversity associated with mangroves, we have precedent with previous work deploying baited remote video to assess shark and target reef fish populations in a very similar context but in the eastern Indonesian location of Raja Ampat. We are extremely familiar with the operational costs and budgets associated with conducting these work scopes utilizing a mix of local and international expertise. The main assumptions that we make are that the locally available expertise and personnel are similar in terms of field operational proficiencies as encountered for these alternative programs. The contingencies against this assumption is that for biodiversity and fish assemblage monitoring full skills sets such as vessel operation, gear deployment and data management will be available as redundant within the team wherever possible.

26. 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.

(max 150 words)

A set of cost effective stereo – baited video cameras will be fabricated by Dr Ben Fitzpatrick who has been instrumental in the development and application of this technique for assessing impacts on marine life (Fitzpatrick et al 2014, Watson et al 2010, Langlois et al 2010). £10000 worth of equipment will be fabricated, and these units will be used extensively during the life of the program. These will be maintained for use on this program and similar Oceanwise Australia, Planet Indonesia fisheries related projects.

27. Match funding (co-finance)

a) Secured

Provide details of all funding successfully levered (and identified in the Budget) towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity.

Confirmed:

Franciscan Sisters of Mary – FSM is a philanthropic and impact investing organization based in St. Louis, MO, where Planet Indonesia – USA is based. FSM provides PI annually with core funding that is used to help cover overhead costs. In 2016, a member passed away and left \$XXX,XXX USD ~ £XXX,XXX GBP to Planet Indonesia in a restricted grant to be used towards our coastal management work.

Private Donors – Planet Indonesia has a group of private individual donors who make annual unrestricted donations to our US based not-for-profit. These funds are used to cover operational and overheads costs.

Oak Fund – In December 2017, the Oak Fund provided \$XX,XXX USD, ~ £XX,XXX GBP in core funding to Planet Indonesia to help grow and scale-up the organization.

27b) Unsecured

Provide details of any matched funding where an application has been submitted, or that you intend applying for during the project. This could include matched funding from the private sector, charitable organisations or other public sector schemes.

Date applied for	Donor organisation	Amount	Comments
October 2017	The Waterloo Foundation	£XX,XXX GBP	Concept was invited for a full proposal, final decision has not yet been made
October 2017	Mulago Foundation	\$XXX,XXX USD ~ £XX,XXX GBP	Mulago foundation provides unrestricted core funding to organizations that can go to scale. They have no application process, but rather invite founders of organization to become Rainer Fellows. Adam Miller is currently in the selection process for Planet Indonesia.
Will apply to the 2018 – 2019 funding round	Australian Department of Foreign Affairs and Trade – Direct Aid Program	\$XX,XXX AUD ~ £XX,XXX GBP	DAP projects cover a range of sectors such as education, health, water and sanitation, environmental protection, women's empowerment and gender equality, supporting people with disabilities, economic livelihoods, food security and human rights.

27c) None

If you are not intending to seek matched funding for this project, please explain why.

(max 100 words)

In addition to the ~ £XXX,XXX we have already secured for this program we are actively seeking further funds to support the implementation of this program here as well as scaling our

up to introduce it in other Indonesian locations. We have commenced aligning our outcomes with similar programs conducted by colleagues elsewhere within Indonesia and internationally as discussed above.

28) Financial Management Risks

Explain how you have considered the risks and threats that may be relevant to the success of this project, including the risks of fraud or bribery.

(max 200 words)

Planet Indonesia has a strict anti-fraud protocol outlined in our Standing Operating Procedure (add live link). Within our protocol we also require risk assessment and risk management forms be filled in and analysed for every project. Furthermore, we audit our Indonesian accounts annually, and use form 990 for 501c3 IRS status to represent our US-based organization annual financial summaries and forms. Planet Indonesia has both an Indonesian and US board of directors that oversee financial reports, spending, and provide oversight into annual goals, growth, and overall organization direction. We are not new to operating within Indonesia and have been successfully implementing an extensive works program initially focused on improving the trajectory of communities dependent upon forest ecosystems and assisting in addressing conservation issues including illegal logging and clearing for palm oil, wildlife trapping and more with extremely positive outcomes for these communities. We have developed and refined our model towards achieving positive socio-economic and conservation gains that improve gender balance and equitable distribution of resources, completely neutralizing and counteracting many of the risks and threats typically associated with such activities including corruption, death threats, and also risks from natural causes such as disease, storms and other disasters.

FCO Notifications

Please check the box if you think that there are sensitivities that the Foreign and Commonwealth Office will need to be aware of should they want to publicise the project's success in the Darwin competition in the host country.

Please indicate whether you have contacted your Foreign Ministry or the local embassy or High Commission (or equivalent) directly to discuss security issues (see Guidance) and attach details of any advice you have received from them.

Yes (no written advice) **Yes, advice attached** **No**

Certification

On behalf of the trustees/company* of
(*delete as appropriate)

I apply for a grant of £300,000 in respect of **all expenditure** to be incurred during the lifetime of this project based on the activities and dates specified in the above application.

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 enclose CVs for key project personnel and letters of support.
- I enclose our last two sets of signed audited/independently verified accounts and annual reports

Name (block capitals)	Dr Benjamin Michael Fitzpatrick
Position in the organisation	Director Oceanwise Australia

Signed**

Date:

27th January 2017

If this section is incomplete or not completed correctly the entire application will be rejected. You must provide a real (not typed) signature. You may include a pdf of the signature page for security reasons if you wish. Please write PDF in the signature section above if you do so.

Stage 2 Application – Checklist for submission

	Check
Have you read the Guidance ?	Yes
Have you read and can you meet the current Terms and Conditions for this fund?	Yes
Have you provided actual start and end dates for your project?	Yes
Have you provided your budget based on UK government financial years i.e. 1 April – 31 March and in GBP?	Yes
Have you checked that your budget is complete , correctly adds up and that you have included the correct final total on the top page of the application?	Yes
Has your application been signed by a suitably authorised individual? (clear electronic or scanned signatures are acceptable)	Yes
Have you included a 1 page CV for all the key project personnel identified at Question 6 and Question 10?	Yes
Have you included a letter of support from your <u>key</u> partner organisations identified at Question 9?	Yes
Have you been in contact with the FCO in the project country/ies and have you included any evidence of this?	Yes
Have you included a signed copy of the last 2 years annual report and accounts for the lead organisation? YES - 2017 with 2016 In Prep	2017 FYO
Have you checked the Darwin website immediately prior to submission to ensure there are no late updates?	Yes

References

Flora Jaiteh V., Lindfield S.J, Mangubhai S., Warren C., Fitzpatrick B.M., Loneragan N., 2016, Higher Abundance Of Marine Predators And Changes In Fishers' Behavior Following Spatial Protection Within The World's Biggest Shark Fishery, *Frontiers in Marine Science*, Accepted for publication.

Fitzpatrick B.M., Harvey E. S., Langlois T. J., Babcock R., 2014, Effects of fishing on fish assemblages at the reefscapes scale, *Marine Ecology Progress Series*, DOI: 10.3354/meps11077

Fitzpatrick, B.M., Harvey, E., Heyward, A., Twiggs E.J., Colquhoun J., 2012, Habitat Specialization in Tropical Continental Shelf Demersal Fish Assemblages. *PLoS ONE* 7(6): e39634. doi:10.1371/journal.pone.0039634.

Langlois TJ, Harvey ES, Fitzpatrick B.M., Meeuwig JJ, Shedrawi G, et al. (2010) Cost-efficient sampling of fish assemblages: comparison of baited video stations and diver video transects. *Aquatic Biology* 9: 155–168.

Watson DL, Harvey ES, Fitzpatrick B.M., Langlois TJ, Shedrawi G (2010) Assessing reef fish assemblage structure: how do different stereo-video techniques compare? *Marine Biology* 157: 1237–1250.

Once you have answered the questions above, please submit the application, not later than 2359 GMT on Monday 29 January 2018 to Darwin-Applications@ltsi.co.uk using the application number (from your Stage 1 feedback letter) and the first few words of the project title **as the subject of your email**. If you are e-mailing supporting documentation separately please include in the

subject line an indication of the number of e-mails you are sending (eg whether the e-mail is 1 of 2, 2 of 3 etc). You are not required to send a hard copy.

Data Protection Act 1998 - Fair Processing Notice

The purpose of this Fair Processing Notice is to inform you of the use that will be made of your personal data, as required by the Data Protection Act 1998.

The Department for Environment, Food and Rural Affairs (Defra) is the data controller in respect of any personal data that you provide when you complete your application, the grant acceptance and the supplier forms.

Defra will use your personal data primarily for the purpose of processing your application for Darwin Initiative funding. By submitting an application, applicants have agreed to any disclosure of the information supplied (including the content of a declaration or undertaking) which Defra considers necessary for the administration, evaluation, monitoring and publicising of the Funds (as detailed in the paragraphs below).

A completed application form signifies agreement to place certain details of successful applications (i.e. name, title, total grant value, project summary, lead organisation and location of project work) on the Darwin Initiative websites listed below. A completed application form also signifies agreement to send data on the project proposals during the application process to British Embassies and High Commissions outside the UK, including those outside the European Economic Area.

<http://www.darwininitiative.org.uk>;

<https://www.gov.uk/government/groups/the-darwin-initiative>;

Application form data will also be processed by Defra contractors dealing with Darwin Initiative administration, monitoring and evaluation (working within relevant data protection rules).

Defra may be required to release information, including personal data and commercial information, on request under the Environmental Information Regulations 2004 or the Freedom of Information Act 2000. However, Defra will not permit any unwarranted breach of confidentiality nor will we act in contravention of our obligations under the Data Protection Act 1998. The Grantee shall assist and co-operate with the Department (at the Grantee's expense) to enable the Department to comply with its disclosure obligations under these enactments.

We may use information, including personal data, to test computer systems to ensure that they work effectively and efficiently and to develop new systems in order to improve efficiency and the service that we provide to you and other persons. Any use of information for testing or developing computerised systems will be conducted in a secure manner in accordance with the Data Protection Act 1998 to safeguard the privacy of the information that you have supplied.

Defra's Personal Information Charter, which gives details of your rights in respect of the handling of your personal data, is on the Defra section of Gov.uk. If you don't have access to the internet, please telephone the Defra helpline 08459 33 55 77 and ask to speak to the Data Protection Officer for a copy of the Information Charter.