



2/4125



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:	Fauna & Flora International (FFI)
Address:	David Attenborough Building, Pembroke Street,
City and Postcode:	Cambridge, CB2 3QZ
Country:	United Kingdom
Email:	
Phone:	

2. Stage 1 reference and Project title

Stage 1 Ref:	Title (max 10 words):
4125	Enabling ecosystems to deliver sustainable development goals at Lake Indawgyi

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)

The project will protect forest and wetland biodiversity including habitat for >20,000 birds and numerous threatened species, such as vultures, cranes, turtles, hog deer, pangolins, bears, langurs, gibbons and others, in the globally important Indawgyi Lake Biosphere Reserve. It takes an ecosystems approach at watershed scale, building capacity for collaborative conservation management and improving natural resource management and local livelihoods, benefitting 10,000 people. The project is particularly innovative in engaging the emerging private sector in Myanmar to support sustainable practices.

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: Myanmar	Country 2: Cambodia (for transfer of knowledge from Tonle Sap Lake)
Country 3:	Country 4:

5. Project dates, and budget summary

Start date: 1 July 2018		End date: 31 March 2021		Duration: 2 years 9 months	
Darwin funding request (Apr – Mar)	2018/19 £ 88,576	2019/20 £ 140,129	2020/21 £ 100,885	Total £ 329,590	
Proposed matched funding as % of total Project cost					32% (of which 100% confirmed)

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	Project Partner 1	Project Partner 2
Surname	Momberg	U Tin Wai	U Tin Tun
Forename (s)	Frank	-	-
Post held	Myanmar Programme Director	Chairman	Chairman
Organisation (if different to above)	Fauna & Flora International	Indawgy Environmental Development Association (IEDA)	Mohnyin Natural Greening Development Association (MNGDA)
Telephone			
Email			

Details	Project Partner 3	Project Partner 4	Project Partner 5
Surname	Hand	U Win Naing Thaw	U Tin Soe
Forename (s)	Taber		
Post held	Director	Director NWCD	Chairman
Organisation (if different to above)	Wetland Works	Nature and Wildlife Conservation Division (NWCD), Forest Department (FD)	Indawgyi Natural Farming Association (INFA)
Telephone			
Email			

Details	Project Partner 6	Project Partner 7	
Surname	U Nyan Lin	Zwe Zaw Zaw Hein	
Forename (s)			
Post held	Managing Director	Director	
Organisation (if different to above)	Shan Maw Myae Ltd.	Inn Chit Thu	
Telephone			
Email			

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

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

Reference No	Project Leader	Title
24-004	Laura Fox	Conserving critical forest biodiversity in Guinea through sustainable agricultural livelihoods
24-002	Rob Small	Cattle, water and wildlife: enhancing socio-ecological resilience in Laikipia
24-020	Edgard Herrera	Realising the values and benefits for communities of Nicaragua's turtles

24-008	Nicola Frost	Effective marine resource co-management in the Pemba Channel Conservation Area
24-007	Andhy Sayogo	Raja Ampat ridge-to-reef conservation and sustainable livelihoods
24-006	Vicky Wilkins	Enhancing forest biodiversity and community resilience to Tajikistan's changing climate

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?	Established in 1903, registered as a charity in the UK in 1992
What is the legal status of your organisation?	NGO Yes Government No University No Other (explain)
How is your organisation currently funded?	Fauna & Flora International is funded from a range of sources, including trusts and foundations (60%), government and multilateral sources (18%), individual donations (12%), corporate partnerships (9%) and membership donations (1%). The majority of funding is in the form of grants and awards, however individual donations and memberships donations are unrestricted. FFI also secures funds by undertaking contracts.
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	
Value	
Duration	
Role of organisation in project	

Brief summary of the aims, objectives and outcomes of the contract/award.	
Client/independent reference contact details (Name, e-mail, address, phone number).	

2. Title	
Value	
Duration	
Role of organisation in project	
Brief summary of the aims, objectives and outcomes of the contract/award.	
Client/independent reference contact details	

3. Title	
Value	
Duration	
Role of organisation in project	
Brief summary of the aims, objectives and outcomes of the contract/award.	
Client/independent reference contact details	

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

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

Aims (50 words)
Activities (50 words)
Achievements (50 words)

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.

Lead institution and website: Fauna & Flora International www.fauna-flora.org	Details (including roles and responsibilities and capacity to lead the project): (max 200 words) <p>FFI has been working in Myanmar since 2007, supporting local civil society in sustainable natural resource management at project sites throughout Myanmar. FFI is operating under MoUs with the Forest Department and the Fisheries Department. FFI has been working in Kachin State since 2012 to strengthen the role local civil society organizations in sustainable natural resource management and biodiversity conservation.</p> <p>FFI is operating throughout Myanmar with 56 national staff with expertise in conservation, community development, sustainable agriculture, fisheries and forestry, supported by 5 international staff with expertise in integrated conservation and development projects.</p> <p>FFI's role and responsibility is the overall project management, technical assistance, training and capacity building for local partners and beneficiaries in sustainable natural resource management and collaborative protected area management.</p> <p>This project builds on FFI's previous work in building capacity for local village-based civil society organizations in Indawgyi, including forest user groups, fisheries groups, and organic farming groups. FFI facilitated the Forest Department to prepare the Biosphere Reserve nomination, zonation and management plan with the full free, prior and informed consent of all stakeholders. The objectives and activities of this project are included in the Biosphere Reserve management plan, which has been completed in December 2017.</p>
Have you included a Letter of Support from this institution? If not, why not?	Yes

<p>Partner Name and website where available:</p> <p>Nature and Wildlife Conservation Division, Forest Department</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>Nature and Wildlife Conservation Division (NWCD), Forest Department (FD) chairs the management committee of Indawgyi Biosphere Reserve and is key partner for collaborative, ecosystem services based protected area management.</p> <p>FFI has a MoU with the Forest Department, which provides the legal framework for the project. NWCD staff will benefit from technical training, capacity building and local stakeholder involvement in protected area management, but are not a direct financial beneficiary. The Indawgyi Biosphere Reserve management committee and the wildlife sanctuary staff will be involved in all activities.</p> <p>FFI has secured co-financing from ACB to support collaborative monitoring, patrolling and law enforcement in collaboration with NWCD, and the Biosphere Reserve management committee and wildlife sanctuary warden.</p>
<p>Have you included a Letter of Support from this institution? If not, why not?</p>	<p>NWCD is not a financial beneficiary. FFI has a current MOU with the Forest Department which is provided in lieu of a letter of support.</p>

<p>Partner Name and website where available:</p> <p>Indawgyi Environment and Development Association (IEDA);</p> <p>Mohnyin Natural Greening and Development Association (MNGDA)</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>IEDA/ MNGDA, local community forestry associations, partners to support forest user groups (FUG) to implement community-based forest conservation, community forestry, agroforestry in the watershed and promote the adoption of firewood saving stoves/ electric stoves.</p> <p>FFI has supported community forestry development in Kachin state since 2012. After the initial focus on direct training, financial and technical support to FUGs, FFI facilitated the establishment of IEDA/ MNGDA as community forestry associations, providing technical support to its FUG members. Both encourage the development of new FUGs, increase of their FUG membership and enlarge community forestry leasehold areas of their members. FFI will take a training of trainers' approach to build the capacity of the two CF associations and provide technical and financial support to enable them to support its FUG members.</p>
<p>Have you included a Letter of Support from this institution? If not, why not?</p>	<p>Yes</p>

<p>Partner Name and website where available:</p> <p>Indawgyi Natural Farming Association (INFA)</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>INFA's vision is to promote organic farming practices throughout the Indawgyi Lake Basin, improve local livelihood while protecting the environment</p> <p>INFA will facilitate knowledge exchange and training for members in organic rice farming and promote organic farming in Indawgyi. INFA will actively seek new members to upscale the adoption of organic farming. INFA will establish and operate an internal control mechanism for organic farming to fulfill the conditions for organic farming group certification.</p> <p>The members of the Indawgyi Natural Farming Association are all local farmers in the Indawgyi lake basin that are dedicated to adopt organic farming practices and support sustainable agriculture development in the lake basin. The Association has been established by farmers from 4 villages in February 2017 and together with Shan Myo Mae conducted initial training in organic farming practices and introduction to soil management and organic fertilizers in March 2017.</p>	
<p>Have you included a Letter of Support from this institution? If not, why not?</p>		<p>Yes</p>

<p>Partner Name and website where available:</p> <p>Shan Maw Myae</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>Shan Maw Myae (SMM), is a national organic product trading company. The contracts with farmers will include embedded services: agricultural extension in organic agriculture, rice-mill servicing, technical support for rice flour production, and marketing of organic rice flour and/or value added products.</p> <p>Shan Maw Myae has substantial experience related to organic farming and food processing, which includes:</p> <ul style="list-style-type: none"> • Extension services for organic farming • Production and distribution of organic fertilizers • Rice flour production and marketing • Development and marketing of value-added products from rice flour • Import of organic agricultural inputs from Japan and India. • Active member in IFORM (International Federation of Organic Agriculture Movement), International Food Security Working Groups in Myanmar and Local Business Associations related to international markets. • Participation in international trade fairs for organic agricultural products corps held by neighbouring countries. • Implementation of internationally supported community development projects as the founder of DEAR Myanmar, a
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	local NGO.
Have you included a Letter of Support from this institution? If not, why not?	Yes

Partner Name and website where available: Inn Chit Thu	Details (including roles and responsibilities and capacity to engage with the project): (max 200 words) Inn Chit Thu (ICT) , local CSO partner to implement an awareness programme for improved household sanitation and community-based waste management. Inn Chit Thu has already initiated community-based waste collection and implemented awareness campaigns for waste management and improved sanitation in Indawgyi. ICT will implement waste management and sanitation awareness campaigns in all villages surrounding the lake. With support from Wetland Works ICT will introduce 'HandyPod' household sanitation systems to flood prone households and increase the uptake through social marketing and the provision of revolving funds and 'smart' incentives.
Have you included a Letter of Support from this institution? If not, why not?	Yes

<p>Partner Name and website where available: Wetlands Work</p>	<p>Details (including roles and responsibilities and capacity to engage with the project): (max 200 words)</p> <p>Wetlands Work (WW), a Cambodian social enterprise, will transfer knowledge for community-based sanitation in flood-prone areas from Tonle Sap Lake to communities in Indawgyi.</p> <p>WW has developed the HandyPod, the first sanitation system appropriate for low-income floating and flood-prone communities.</p> <p>Additionally, WW has trialled unique sanitation marketing in 10 Tonle Sap Lake villages to develop supply <i>and</i> demand-side elements necessary for a sustainable local market-based programme.</p> <p>With Inn Chit Thu (ICT), WW will market sanitation by training local teams of makers/sellers to fulfil the supply chain. WW will lead ICT to introduce HandyPod awareness and demand using a sanitation raffle event, where households buy a ticket with a Indawgyi-logo cup for the chance to win a HandyPod. Once winner installations are completed, with 5 or more winners for every 100 flood-prone households, the ensuing neighbourhood exposure promotes HandyPod sanitation advantages and leads to market demand. Initially, WW will assist in 4 village events for sanitation marketing to ensure smooth coordination and to adaptively manage the programme, with later distributions totalling 200 HandyPods through 'lucky draw' events. Each raffle event will be followed with marketing information regarding treatment system purchases outright, potentially through a revolving loan programme, or by 'smart' subsidies.</p>
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	Organization	% time on project	1 page CV or job description attached*?
Frank Momberg	Project Leader	Fauna & Flora International	5%	Yes
Ngwe Lin	Project Manager	Fauna & Flora International	62%	Yes
Myint Shwe	Field Coordinator	Fauna & Flora International	100%	Yes
Myint Soe Oo	Community Forestry Advisor	Fauna & Flora International	50%	Yes

Laura Fox	Agriculture and Biodiversity Expert	Fauna & Flora International	1%	Yes
Christina Archer	Consultant, sustainable supply chain expert	Fauna & Flora International	5%	Yes
Taber Hand	Sanitation expert	Wetland Works	10%	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)

Lake Indawgyi, a Ramsar site, is Myanmar's most important wintering ground for >20,000 water birds. Indawgyi's wetlands support significant populations of threatened species: Sarus crane (VU), Woolly-necked stork (VU), Peacock softshell turtle (EN), Hog deer (EN), and threatened fish species, including 6 newly-described endemics. Watershed forests support Chinese pangolin (EN), Asiatic black bear (VU), Sun Bear (VU), Dhole (EN), Shortridge's leaf monkey (EN), Eastern hoolock gibbon (VU), Rufous-necked Hornbill (VU). White-rumped and Slender-billed vultures (CR) are also present.

This rich biodiversity is under threat from multiple pressures. Unsustainable firewood collection, illegal timber extraction, and agricultural encroachment in the upper watershed are causing soil erosion and sedimentation. Traditional low-input rice production is being replaced by chemical fertilizers and pesticides which are threatening the fish and bird species in the lake. Poor sanitation facilities are an additional, severe and increasing source of pollution in the wetlands. Elsewhere, at Lake Inle, chemical fertilizers and degradation of the watershed have caused the lake to silt by 2m, and rendered the lake water unsafe for drinking, threatening biodiversity and human health. It is imperative that we learn from this situation and take early mitigating action at Lake Indawgyi.

The livelihoods of 30,000 indigenous people depend on ecosystem services provided by Indawgyi's wetlands and forests. Most poor households undertake agricultural activities; farm sizes are small and many lack sanitation. Addressing their urgent development needs is essential to promoting human health, economic development, and protecting the unique biodiversity of this globally important wetland.

FFI facilitated the successful nomination of the lake basin as UNESCO Biosphere Reserve to support an integrated approach to biodiversity conservation and sustainable development. We work in close collaboration with local communities, organisations and businesses. These partners and our experience have identified the threats to biodiversity and informed the project design.

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)

In the Myanmar 2015-2020 National Biodiversity Strategy and Action Plan (NBSAP), the first major threat to biodiversity in Myanmar is named as the *'limited grass-roots support for conservation and undervaluation of ecosystem services and biodiversity'*. As such a priority action of the NBSAP is *'outreach and awareness raising with a change in behaviour of select groups'* (page 31). Communities in and around key biodiversity areas and the private sector are listed as two key audiences for behaviour change projects.

The project will support the implementation of the NBSAP by enhancing local people's awareness of biodiversity values, its protection and sustainable use. This will be done through multiple means: establishing a collaborative Biosphere Reserve management system, establishing forest user groups; increasing awareness of biodiversity and the impact of human behaviour on natural resources during water and sanitation consultations and activities. It will additionally work with the emerging private sector in Myanmar to increase private sector awareness of the importance of safeguarding natural resources for sustainable business.

These activities fit within the framework of the Myanmar NBSAP under action 1.4.1 *'Increase number of annual discussions, outreach, and FD [forest department] extension activities with local communities living in and around PAs'* and 1.2.1 *'Work with business associations in relevant sectors... to raise awareness of biodiversity through Business Ecosystem Training'* and are in support of Aichi targets 1.4 and 1.2 respectively.

Given the project takes place within a Ramsar site, the project additionally supports the Myanmar NBSAP action 5.3.3 *'Establish community-based participatory monitoring and FD, NGOs management programme in Ramsar sites and potential Ramsar wetlands'*.

Sustainable rice cultivation is a particular area of focus for the CBD in Myanmar, recognizing the threats and opportunities posed by the industry. Target 7.1 is that *'By 2020, SRI and other forms of environmentally friendly rice production have been implemented in 10% of rice paddy area'*. This project, through output 3, directly addresses this target and both supporting actions.

Forest loss and degradation are an additional priority for Myanmar in protecting biodiversity. The NBSAP recognizes that community forestry initiatives have had some success in Myanmar and that NGOs are well placed to support further work in this area (page 48). The project will address forest loss and degradation by providing access to forest land for local communities in designated buffer zones for community forestry and community-based protection of remaining old-growth forests and support sustainable farming while reducing agricultural-based impacts on the lake and associated wetlands.

FFI' will share lessons learned from this project by feeding into strategic planning workshops and policy workshops at district, state and national level, as well as through policy briefing papers for national Biosphere Reserve and collaborative protected area management.

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

Yes if yes, please give details:

FFI has a MoU with the Forest Department (FD), which is the focal point for CBD and CITES. In the context of this project FFI will report monthly to the FD on project progress and liaise regularly on protected area/ Biosphere Reserve management/ collaborative law enforcement. FFI will continue to provide input for FD's annual national reporting to CBD/ CITES.

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)

At impact level, this project will support **SDG 15** by protecting and sustainably managing forests and associated biodiversity through collaborative protected area management contributing to **Targets 15.1, 15.2, 15.5, 15.7**.

Additionally, through the approach and activities, this project will contribute to **Target 1.1** by decreasing the number of people in living on less than \$1.25 per day through the introduction of post-harvest processing and production of value-added organic rice products that secure premium prices and for which market demand is increasing. **Target 1.4** will be address by securing legal access rights to forest and wetland resources through implementing newly designated buffer zones.

The project will contribute to **Target 2.4**, by implementing resilient agricultural practices – organic rice and dry-seasons crops - that maintain ecosystem services, and that mitigate an emerging threat to land and water quality, namely chemical agricultural inputs.

Women will be actively involved in management and this project will ensure women take meaningful decision making roles, thereby contributing to **Target 5.5**.

Promoting organic agriculture will mitigate the use of chemicals, thereby safeguarding and improving water quality, contributing to **Target 6.3**. Addressing water and sanitation needs around the lakeside, will also contribute to **Targets 6.2, 6.6 and 6b**.

The project will promote sustainable production by promoting organic inputs and achieving organic certification, thereby positioning natural resources explicitly as the economic asset on which this economic activity depends. This decouples economic growth from environmental degradation, directly contributing to **Target 8.4**.

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.)

FFI will support the Forest Department to adopt a collaborative, ecosystem services-based approach to protected area management, establish a multi-stakeholder management committee for Lake Indawgyi Biosphere Reserve, and support the committee to plan and implement integrated conservation and development interventions.

Since the biodiversity of Lake Indawgyi and associated wetlands depend on the integrity of the entire lake basin, the project will:

- Reduce deforestation and forest degradation in the watershed, protect forest biodiversity and prevent downstream sedimentation through community-based protection of old-growth forests in core zones and community forestry/ agroforestry in designated buffer zones.
- Support bird-friendly organic farming in paddy fields surrounding the lake to reduce agricultural run-off, preventing eutrophication and pollution of the lake, maintaining paddy fields as feeding habitat for globally threatened water birds such as Sarus cranes and Woolly-necked storks, while improving farmers' livelihoods through the development of value-added organic products.
- Introduce improved household sanitation and community-based waste management in flood-prone areas around the lake to reduce pollution and prevent eutrophication.

FFI will build the capacity of local **community forestry associations (IEDA/ MNGDA)** in the Indawgyi region to support local forest users to prepare equitable community forestry management plans and undertake reforestation, assisted natural regeneration, sustainable harvesting of firewood, community based protection of primary forests, and secure community forestry certificates..

Shan Maw Myae (SMM) organic trading company will support FFI to build the capacity of the **Indawgyi Natural Farmers Association** to support female and male farmers to adopt organic practices for paddy rice farming, establish internal control systems for group certification and support organic certification. SMM will support the development of value chains for organic products to increase farmers' incomes and take advantage of growing demand for organic rice and rice products (see section 14 for more detail). Organic bird-friendly rice farming interventions will focus on lakeside paddy fields to reduce agricultural run-off into the lake to reduce or avoid eutrophication and pollution of the lake.

The project will introduce improved household sanitation in flood prone village areas with support from **Wetlands Work** using their experience of low-cost sanitation and sanitation marketing for flood-prone villages in Cambodia and promote community-based waste management in collaboration with a local CSO, Inn Chit Thu. Sustainable sanitation and waste management will be driven by local business operators and the communities' desire to pay for sanitation and waste collection.

FFI is responsible for overall project management and technical assistance to the Forest Department and local CSO partners. Local partners will be responsible for the implementation of natural resource management interventions to mitigate threats to Indawgyi Lake, associated wetlands and watershed forests while improving livelihoods and the wellbeing of local communities.

The project will take a gender-sensitive approach, accounting for the different roles, skills, knowledge, needs and aspiration of women and men, addressing barriers to women's participation. We will disaggregate data by sex in order to monitor and evaluate gender-differentiated impacts, and adapt activities as necessary to improve equity.

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)

In the **short-term**, the Biosphere Reserve Management Committee will have increased capacity in collaborative protected area management, including collaborative patrolling and law enforcement. All project stakeholders – female and male – will benefit from decentralised collaborative management and integrated planning for conservation and sustainable development.

Based on the new Biosphere Reserve status, the project will provide legal access for at least 20 forest user groups (c. 1,000 households/ 5,400 people) to land within designated buffer zones in the upper watershed for community forestry, agro-forestry and forest protection. Community forestry associations will have increased capacity to provide extension services for forest users. By the end of the project all forest user groups will hold community forestry certificates and benefit from sustainable access to firewood, fuel and food.

200 men and 200 women (from 200 pilot households) will adopt organic farming techniques in lake shore areas with eutrophication problems. The production of value-added rice flour from wildlife-friendly organic rice will increase income while protecting the birds that feed in the paddy fields. Market analysts predict a 5.2% increase in demand for rice flour until 2025. Value-added products such as noodles and baked goods also have buoyant markets¹. Organic rice farming will specifically benefit Woolley-necked storks and Sarus cranes (VU), as both feed, and the latter also breeds, in the rice fields.

Wastewater treatment, community-based waste management and the introduction of organic farming practices will significantly reduce biological oxygen demand (BOD) and nutrients in the nearshore littoral zone, contributing to the health of underwater plants which underpin much fish and avian biological diversity.

At least 1,080 people (50:50 male and female/ 200 households) will benefit from improved sanitation in flood-prone areas, and 5,400 people living on the lakeside (1,000 households) will benefit from improved waste management.

In the **long-term**, demonstration that there is a viable and stable market for organic rice products, leading to increased income from sales of organic brown rice and value-added goods will encourage further organic farming and mitigate the risk of chemical inputs and run-off. Soil erosion and sedimentation will reduce as a result of sustainable forest use, and we anticipate that decreases in untreated waste will eventually benefit the health of all lakeside people as the overall lake water quality improves.

Together, these three themes of forest use, wetland use and sanitation/ waste management will conserve this vital habitat for >20,000 birds and habitat for many threatened species such as Sarus cranes, Woolly-necked and Lesser Adjutant storks (VU), Rufous-necked Hornbill (VU), Yellow-headed tortoise, Asian giant turtle and Myanmar Peacock softshell turtle (EN), Hog deer (EN), Shortridge's leaf monkey (EN), Eastern Hoolock gibbon (VU), Dhole (EN), Chinese pangolin (EN), Asiatic black bear (VU), several threatened endemic fish species new to science and more.

By promoting community ownership, mainstreaming sustainable practices into emerging business, and supporting local government and NBSAP priorities, we will protect the Lake Indawgyi biodiversity in perpetuity and prevent the degradation already experienced elsewhere in Myanmar.

¹ <http://www.transparencymarketresearch.com/rice-flour-market.html>

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)

The project team has context-specific experience of working to ensure gender equity in the Lake Indawgyi area, as well as elsewhere in Myanmar. Both women and men are key stakeholders in all aspects of the project. Women are the main collectors and users of firewood and hence will be empowered to take an active role in community forest management institutions, alongside men.

Women and men share all aspects of rice cultivation with the exception of ploughing which is done exclusively by men. Activities with rice farmers will therefore be undertaken at times, places and using materials and methods that are accessible to both women and men, taking into account this division of labor. The successful adoption of improved waste and sanitation methods will be largely dependent on the active participation of women. The project will therefore take specific measures to ensure that the activities undertaken and facilities provided are appropriate to the needs of women and girls.

FFI will prepare a gender tracking tool for the project to collect, monitor and evaluate gender disaggregated data. This will include collection of disaggregated data on beneficiaries, such as male/ female participation in all project activities, monitoring the representation for women in the governance structures and processes of local civil society partners. The project will actively support CSO project partners as well as beneficiary groups such as the local forest user groups, organic farming groups, tourism committees and sanitation groups to ensure women's participation in project activities as well as women's meaningful representation in the governance structure and processes of the local groups.

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)

The sustainability of the organic farming component is high, since there are good market prospects to accommodate higher rice exports from Myanmar over the next 10-15 years. Value-added products such as noodles and baked goods also have buoyant markets, with a 5.2% predicted annual global increase in demand for rice flour until 2025. Our private sector partner has also identified a very promising local market for rice flour.

The project will attract an increasing number of farmers to adopt organic farming and join the Indawgyi Natural Farmers Association. Management and finance training for the Association will improve its financial sustainability. Organic farming removes fertilizers and pesticides and reduced deforestation reduces siltation, protecting soil, water quality and protecting habitat for vulnerable and endangered species.

Forest user groups will receive 30 year extendable leasehold titles, providing a long-term supply of timber as well as short-term income from agroforestry crops.

Wetlands Work's sanitation programme will create a local market for sanitation that is sustainable.

Based on the Biosphere Reserve management plan, the Forest Department is preparing an increased budget request for investments, operations and personnel, which would enable the management authority to cover the costs for the collaborative protected area management in future.

17a. Harmonisation

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

(Max 200 words)

This is a new initiative which builds on two previous FFI projects, existing partnerships and knowledge:

1) Building the capacity of local civil society organizations in Kachin state in sustainable natural resource management. This project assisted local villagers in Kachin state, including the Indawgyi area, to develop local civil society organizations and undertake sustainable community-based natural forest management. (EU 2012-2016)

2) Participatory designation of Lake Indawgyi as a Ramsar site and Biosphere Reserve and the development of a multi-designation protected area management plan. (ACB/ BMU 2017)

These previous projects enabled FFI to develop local village-based CSO partners and facilitate a participatory consultation and planning process for this Darwin application.

All Darwin project objectives and activities have been included in the five year biosphere reserve management plan (2018 – 2022). All partners delivering the five year management plan are partners in this proposed project, removing the risk of duplicate activities.

FFI and an additional partner, Friends of Wildlife, have applied for funding from the ASEAN Centre for Biodiversity/ BMZ for a separate sustainable fisheries and ecotourism project. This will be highly complementary to the work described here and contribute to the overarching goal for conservation and sustainable development in Lake Indawgyi.

17b. Are you aware of any other individuals/organisations/projects carrying out or applying for funding for similar work? No

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

18. Ethics

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

(Max 300 words)

The proposal has been developed together with local partners and beneficiaries. All activities have been integrated in the Indawgyi Biosphere Reserve Management Plan through a year-long, FPIC-based stakeholder consultation process in 2017, involving all beneficiaries and stakeholders at all levels of governance. The management plan provides legal access for local communities to land within designated buffer zones for community forestry, agro-forestry and forest protection.

This project will build the capacity of local communities and other local stakeholders to manage wetland and forest resources in the Biosphere Reserve sustainably and participate in collaborative protected area management.

The local population in Indawgyi includes Shan and Kachin ethnic groups. Shan are the indigenous people of Indawgyi with approximately 45,000 people; various mixed Kachin groups migrated to Indawgyi in the last 40 years. Most of these Kachin ethnic groups have been displaced by civil war from their area of origin. The Shan people are paddy rice farmers and fishermen, while the Kachin people depend on shifting cultivation in the buffer zone. Both Shan and Kachin people depend on non-timber forest products and fire wood, hence the focus on community forestry and agroforestry.

The recently approved Biosphere Reserve management plan provides legal access for local communities to use forest/ wetland resources sustainably in the protected area buffer zones. The project will actively support community forestry/ agroforestry in the degraded watershed to reduce the pressure on remaining primary forests, while improving livelihoods and access to natural resources. No access restrictions are expected except for illegal logging, poaching and wildlife trade of threatened species. However, FFI has developed a process framework to monitor any involuntary access restrictions to natural resources and has established a grievance mechanism. Notice boards highlighting the grievance mechanisms with contact phone numbers will be placed in all project villages.

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)

FFI has implemented an awareness programme about the value of biodiversity in the Indawgyi Biosphere Reserve since 2012 and key stakeholders start to understand and value biodiversity and are aiming to turn that awareness into action. We have undertaken a knowledge, attitude and behavior baseline survey in 2016, which will be repeated in year 3 of the Darwin project.

The Biosphere Reserve Stakeholder Committee includes all relevant government sectors and civil society leaders. Their meetings provide a forum for the project for regular knowledge sharing, dissemination of project results, and collaborative approaches when faced with challenges.

FFI has facilitated the establishment of an Indawgyi CSO network, which will be used to share knowledge, review project progress and disseminate project results through regular meetings.

As part of the water and sanitation component of this project, FFI and partners will run an awareness raising campaign specifically on the links between waste management, biodiversity conservation, health and wellbeing. Lakeside households will receive information on the impact of poor sanitation on health and biodiversity through village meetings and public events.

Based on its MoU with the Forest Department and Fisheries Department, FFI prepares a monthly technical project progress reports which will be a core communication channel to stakeholders at government level.

FFI has also developed a Biosphere Reserve/ wetland education centre in Indawgyi which will be used to train and educate local villagers, CSOs, local government officials, teachers, school classes, and visitors about biodiversity conservation, environmental services, sustainable natural resource management, and integrated conservation and development planning.

FFI will also share lessons learned, prepare and disseminate policy briefs on collaborative protected area management through regional and national policy workshops and conferences.

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)

At individual level, the main groups that will have increased capacity as a result of this project are farming households, members of forest user groups, and people living on the flood-prone lakeshore.

200 farmers will have increased capacity to have their produce certified as organic, and thereby secure higher revenues increasing their capacity to meet their essential household needs.

FFI will provide training of trainers training to facilitators of the community forestry associations (IEDA/MNGDA) and 20 forest user groups and provide ongoing on-the job training, mentoring and progress monitoring.

FFI and Shan Maw Myae will build the capacity of INFA to operate a brown rice/ rice flour mill establish and to operate an internal control system for regular inspection of organic farming practices to full organic certification requirements. They will also have ongoing on-the-job training, mentoring and process monitoring. Their capacity to undertake robust business planning will also be developed through training and mentoring, strengthening the group's ability to function as a viable community enterprise.

FFI will build the organisational capacity of the local CSO partners (IEDA, MNGDA, INFA, ICT) to manage small grants, including accounting, technical and financial reporting, grant proposal writing, to support financial sustainability. Local CSOs will have the capacity to apply for small grants after the Darwin funding ends, for which FFI has secured ACB co-funding beyond the end of the Darwin project.

Wetlands Work will train ICT personnel, and then supervise ICT's training of vendors for HandyPod household sanitation construction, installation and local marketing.

The Biosphere Reserve Stakeholder Committee, which was established by government decree in December 2017, will be trained in collaborative protected area management, and integrated conservation and development planning. The committee will facilitate improved inter-agency collaboration, in particular in law enforcement and environmental sensitive, integrated development planning.

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)

FFI will establish a project website (www.Indawgyi.org) and facebook site to disseminate project progress, as well as provide opportunity to seek information and to provide feedback or express grievances. All outputs will be made available on-line and free.

Access to GIS data will be made publically available on the ARCGIS online platform:
<http://www.esri.com/software/arcgis/arcgisonline>

The consultancy budget includes the costs of approximately £2000 for the development, hosting, maintenance of the website. FFI Myanmar's media/ public relations officer will maintain the project website and social media, as well as respond to any queries from social, print and TV media.

At the local level the Indawgyi civil society network meetings and Biosphere Reserve stakeholder committee meetings will provide open access to project information and queries. Notice boards in project villages will provide information and phone contacts to express grievances.

The project will promote organic certified rice products in collaboration with Shan Maw Myae at food trade fairs in Myanmar and neighbouring Thailand, as well as inform potential export markets and consumers through the International Federation of Organic Agriculture Movements (IFOAM).

FFI will share learning papers and policy briefs on Biosphere Reserve and collaborative management, publish at least on peer-reviewed article and present lessons learned at national policy workshops and at the Asian Tropical Biodiversity Conference.

FFI has a specialist Conservation Finance & Enterprise team that can assist FFI in facilitating learning from this partnership to inform projects elsewhere in the world.

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
Impact: (Max 30 words) The collaborative management and ecosystem services approach achieves effective biodiversity conservation and improved livelihoods in Indawgyi. Lessons learned are shared in Myanmar and through the global network of Biosphere Reserves.			
Outcome: (Max 30 words) Participatory management systems, sustainable natural resource use and improved sanitation bring biodiversity benefits to the Indawgyi Lake Biosphere Reserve and livelihoods and health benefits to more than 10,000 residents.	Note: All socio-economic indicators will be disaggregated by gender and wealth class in order to monitor the equity of project outcomes 0.1 By the end of 2019, a collaborative management committee for Indawgyi Lake Biosphere Reserve will be established and operating 0.2 Number of resident water-birds is stable or increasing throughout the project period (including increasing number of Sarus cranes, VU, feeding in the paddy fields as an indicator species) 0.3 At least 200 farming households (c.1,000 people, 50:50 male/ female) adopt organic farming practices near lakeshore areas with eutrophication problems, by the end of the project	0.1 Government decision on management committee and minutes of committee meetings 0.2 Annual mid-winter bird water census 0.3 Organic farming certificates, internal annual audit and inspection reports	Myanmar government continues to support multi-stakeholder engagement in protected area management The security situation in Indawgyi remains safe Myanmar government continues to support the issuance of community forestry licences in buffer zones of protected areas The market demand for value-added organic/ gluten-free rice products (rice flour) continues to grow Improvements in waste management and sanitation lead to a decrease in water-borne disease and infection

	<p>0.4 By December 2020, at least 20 forest user groups representing 1,000 households (50 households per forest group) adopt community forestry, agro-forestry practices, and establish wood lots</p> <p>0.5 By December 2020, at least 1,000 people (200 households/ approx. 50% of all households in flood prone areas) benefit from improved sanitation systems in the flood prone areas with most severe eutrophication problems</p> <p>0.6 At least 6 villages establish community-based waste management systems; 5,400 people (1,000 households) benefit from waste collection, recycling and safe disposal, by project end</p>	<p>0.4 Community forestry management plans, CF certificates, annual forest user group reports</p> <p>0.5 Annual sanitation assessment to verify numbers of HH adopting improved sanitation.</p> <p>0.6 Annual waste management assessment of the adoption of community-based waste management systems and number of households that join waste collection system</p>	
<p>Outputs:</p> <p>1. 1. A decentralised and collaborative management committee and mainstreamed ecosystem services approach places the Indawgyi Lake Biosphere Reserve under management systems that respect integrated development and biodiversity needs</p>	<p>1.1 Collaborative multi-stakeholder Biosphere Reserve Management Committee operating by 2018</p> <p>1.2 The Biosphere Reserve Management Committee is trained in collaborative protected area management by February 2019 and starts implementing integrated conservation and sustainable development plans</p> <p>1.3 By end of the project improved law enforcement through collaborative</p>	<p>1.1 Minutes of meetings</p> <p>1.2 Training reports/ participant evaluation; annual Biosphere Reserve progress reports for the of implementation of the 5 year management plan</p> <p>1.3 Monthly SMART patrol reports, drone-based threat assessment at the beginning and end of the project.</p>	<p>Myanmar government continues to support multi-stakeholder engagement in protected area management</p>

	<p>patrolling; illegal commercial logging and firewood extraction, forest and wetland encroachment reduced by 50% against baseline.</p> <p>1.4 By December 2020, all BR stakeholder committee members exhibit improved environmental knowledge and attitudes against baseline knowledge, attitude and practice survey.</p>	<p>1.4 Minutes of meetings of BR stakeholder committee; Knowledge, attitude and practice surveys, pre- and post- project interventions.</p>	
<p>2. Community forestry and agroforestry in designated buffer zones of Lake Indawgyi Biosphere Reserve reduce deforestation and forest degradation, while maintaining access to essential natural resources</p>	<p>2.1. At least 20 community forestry user groups established representing >1,000 households (c. 5,400 people, app. 50 households per group) by December 2018</p> <p>2.2. At least 20 community forestry management plans established by December 2019</p> <p>2.3. At least 20 wood lots established by December 2020</p> <p>2.3. At least 20 community forestry licences issued by the end of the project</p> <p>2.6. At least 50% of forest user group members utilise fire-wood saving or electric stoves.</p> <p>2.7. The number of observable illegal logging roads in the project areas is reduced by at least 50% from project baseline to project end (post-monsoon)</p>	<p>2.1. Training reports (participant evaluation, monitoring & evaluation reports</p> <p>2.2. Group formation reported to forest department</p> <p>2.3. Community forestry management plans</p> <p>2.4. Annual reports on Community forestry implementation</p> <p>2.5. Community forestry certificates.</p> <p>2.6. Firewood household survey before and post interventions.</p> <p>2.7. UAV survey at the beginning and end of the project</p>	<p>Myanmar government continues to support the issuance of community forestry licences in buffer zones of protected areas</p> <p>Major natural disasters do not take place within the project sites and period that undermine the access to or availability of forest and forest products.</p> <p>Monsoon and overgrowth removes unused illegal logging roads during the project period, as is usual.</p>

<p>3. Organic rice farming and value-adding practices result in certified organic products that provide income to at least 200 households and protect wetland biodiversity</p>	<p>3.1 By May 2019, farmers representing 200 households, are trained in organic farming rules and concept of group certification</p> <p>3.2 INFA operated rice mill/ rice flour mill established and processing brown rice/ rice flour by December 2019</p> <p>3.3 By December 2019, at least 200 households (c.1,000 people) in the Indawgyi Lake Biosphere Reserve are using only organic agricultural inputs and zero chemical fertilisers and chemicals</p> <p>3.4 By December 2020, at least 70% of target farmers have achieved organic certification by national and/or international standards</p> <p>3.5 Household expenditure on non-organic agricultural inputs per unit yield has decreased from project baseline to endline</p> <p>3.6 Households are achieving a higher net profit per unit yield as a result of value-adding activities between project start and end (expected profits and income increases to be confirmed during business case development in Yr1)</p> <p>3.7 Number of resident water-birds is stable or increasing (including the number of Sarus cranes feeding in the paddy fields – indicator species for water</p>	<p>3.1 Training reports</p> <p>3.2 Rice mill/ rice flour mill (INFA equipment register) records showing volumes processed</p> <p>3.3 Stock control, invoices and financial records showing volumes sold; prices and income to INFA by household.</p> <p>3.4 Organic certification</p> <p>3.5 Receipts showing expenditure for farm inputs</p> <p>3.6 Receipts showing purchase of rice & rice flour/income for INFA members</p> <p>3.7 Annual mid-winter water bird census</p>	<p>The domestic and international markets for organic rice and gluten free products continues to grow during the project period</p> <p>The ability of Myanmar to export to international markets does not alter significantly during the project period</p> <p>SMM remain financially stable and committed to developing the Indawgyi supply chain</p> <p>If only organic agricultural inputs are in use then the chemical inputs and run off will proportionally reduce.</p>
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	quality/ absence of chemical contamination)		
<p>4. At least 1,000 households (c. 5,400 people) participate in community waste collection and safe disposal; at least 200 households (c.1,000 people/ approx. 50% of all HH in flood prone areas) benefit from improved sanitation systems in flood prone areas with eutrophication problems</p>	<p>4.1 By end of 2020, at least 200 new treatment systems are in place located in flood prone areas with severe eutrophication</p> <p>4.2 Reduced pathogens (E-coli) and reduced littoral BOD during the flood season in nearshore water in 2021 compared to base line data collected in 2018 and 2019 (wet and dry seasons)</p> <p>4.3 By end of project, at least 1000 households in Lake Indawgyi area are participating in waste collection; land fill sites established in 3 villages where dumping of waste in the lake is most severe, paid for by users</p>	<p>4.3 Photo evidence of treatment systems</p> <p>4.1 Repeat pathogen survey report showing reduced level of pathogens (E-coli)</p> <p>4.3. Village waste collection agreements; photo documentation of land fill sites</p>	<p>Local communities willing to change behaviour in favour of improved sanitation and waste management</p> <p>There are no significant lakeside developments in this project period that cause an additional source of untreated waste pollution to the lake.</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>1.1 Facilitate regular meeting of the Biosphere Reserve Indawgyi management/ stakeholder committee (quarterly)</p> <p>1.2 Facilitate regular meeting of the Indawgyi civil society network (bi-annual)</p> <p>1.3 Facilitate regular meetings of law enforcement agencies (forest department, Indawgyi wildlife sanctuary/ biosphere reserve management authority, fisheries department police.</p> <p>1.4 Recruit and train local informant network</p> <p>1.5 Recruit local community rangers</p> <p>1.6 Establish two collaborative patrol units (5 pax each), including wildlife sanctuary rangers and community rangers for forest patrols</p> <p>1.7 Establish collaborative lake patrol team (fisheries department, WS, community ranger)</p> <p>1.8 Provide basic field equipment (GPS/ cameras/ field gear)</p> <p>1.9 Provide initial SMART patrolling training to collaborative patrol units, on the job training first 3 month</p> <p>1.10 Provide SMART refresher training</p> <p>1.11 Monthly collaborative SMART patrols, operate informant network</p> <p>1.12 Annual UAV monitoring of encroachment and illegal logging areas</p>			

- 2.1 Establish forest user groups
- 2.2 Train forest user groups in forest inventory and forest management planning
- 2.3 Forest inventory and forest management planning
- 2.4 Train FUGs in tree nursery development
- 2.5 Establish and male nurseries operational
- 2.6 Train FUGs in reforestation/ agroforestry techniques
- 2.7 Establish woodlots and agroforests
- 2.8 Facilitate community forestry certification

- 3.1 Undertake participatory consultation with farmers to establish their knowledge and priority learning needs (knowledge baseline)
- 3.2 Develop training resources that are targeted to the farmer learning needs identified in 3.1, and pilot
- 3.3 Roll out amended training modules and offer refresher training
- 3.4 Review the governance structure and capacities of the INFA and identify priority development needs to enable scale-up, pending the anticipated new membership numbers.
- 3.5 In consultation with INFA and the organic certifier, agree timeline and responsibilities for the certification process
- 3.6 Train internal auditors
- 3.7 Revise and update the INFA governance structures and financial control mechanisms
- 3.8 Establish supply chain control points for rice and rice flour
- 3.9 Set up and prepare for physical installation of flour mill
- 3.10 Procure flour mill
- 3.11 Deliver training on flour mill use and maintenance
- 3.12 Develop and agree with INFA and Shan Maw Myae the detailed 3 year business plan
- 3.14 According to the business plan, identify the priority investments/ infrastructure/ capacities required and support INFA and Shan Maw Myae to address these
- 3.15 According to business plan, establish local sales distribution systems for rice and rice flour
- 3.16 Support INFA to produce and sell rice and rice flour
- 3.17 Base and end line surveys on household incomes and expenditures related to farming

- 4.1 Develop a core team between Inn Chit Thu and Wetlands Work. Develop a HandyPod training programme for construction training and sanitation marketing using informational materials, presentations, workshops, field work, and demonstration sites
- 4.2 ID and train local business operators from the target villages who serve the HandyPod's supply side elements
- 4.3 Organise a Sanitation Raffle (lucky draw) for flood-prone households in each target village involving various leadership levels; promotion, prizes, events coordination
- 4.4 Install winning HandyPods in dry season
- 4.5 Provide faecal sludge management guidance and demonstrations

- 4.6 Monitor and evaluate initial target village strategies; adapt as needed
- 4.7 Explore and specifically define broader scale up of sanitation activities around Lake Indawgyi
- 4.8 Establish baseline information: nearshore pathogens (E. coli) and algal mat density in Year I wet and dry season
- 4.9 Develop waste management awareness materials
- 4.10 Implement waste management awareness campaign
- 4.11 Facilitate establishment of village-based waste management systems, identify supply chain for recycling materials
- 4.12 Establish village land fill sites for safe disposal of waste
- 4.13 Provide support to the new waste collection system

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 A decentralised and collaborative management committee and mainstreamed ecosystem services approach places the Indawgyi Lake Biosphere Reserve under management systems that respect integrated development and biodiversity needs												
1.1 Facilitate regular meeting of the Biopshere Reserve Indawgyi management/ stakeholder committee (quarterly)	1 month	X	X	X	X	X	X	X	X	X	X	X
1.2 Facilitate regular meeting of the Indawgyi civil society network (bi-annual)	0.5 month	X		X		X		X		X		
1.3 Facilitate regular meetings of law enforcement agencies (forest department, Indawgyi wildlife sanctuary/ biosphere reserve management authority, fisheries department police.	1 month	X	X	X	X	X	X	X	X	X	X	X
1.4 Recruit and train local informant network	1 month	X	X									
1.5 Recruit local community rangers	1 month	X	X									
1.7 Establish two collaborative patrol units (5 pax each), including wildlife sanctuary rangers and community rangers for forest patrols	1 month	X	X									
1.8 Establish collaborative lake patrol team (fisheries department, WS, community ranger)	1 month		X	X								

1.9	Provide basic field equipment (GPS/ cameras/ field gear)	0.5 month		X									
1.10	Provide initial SMART patrolling training to collaborative patrol units, on the job training first 3 month	3 month		X									
1.11	Provide SMART refresher training	0.5 month						X					
1.12	Monthly collaborative SMART patrols, operate informant network	6 month		X	X	X	X	X	X	X	X	X	X
M	<i>Milestone: SMART collaborative patrol units trained and operating by December 2018</i>			X									
1.12	Annual UAV monitoring of encroachment and illegal logging areas	3 month					X			X			X
Output 2	Community forestry and agroforestry in designated buffer zones of Indawgyi Lake Biosphere Reserve reduces deforestation and forest degradation, while maintaining access to essential natural resources												
2.1	Establish forest user groups	2 month	X				X						
2.2	Train forest user groups in forest inventory and forest management planning	2 month		X				X					
2.3	Forest inventory and forest management planning	2 month			X				X				
2.4	Train FUGs in tree nursery development	1 month				X				X			
2.5	Establish and male nurseries operational	4 month				X				X			
2.6	Train FUGs in reforestation/ agroforestry techniques	2 month					X				X		
2.7	Establish woodlots and agroforests	2 month					X				X		
M	<i>Milestone: First 10 community forestry/ agroforestry areas established by September 2019</i>						X						

2.8	Facilitate community forestry certification	2 month								X			X	
Output 3	Organic rice farming and value-adding practices result in certified organic products that provide income to at least 200 households and protect wetland biodiversity													
3.1	Undertake participatory consultation with farmers to establish their knowledge and priority learning needs (knowledge baseline)	1 month	X											
3.2	Develop training resources that are targeted to the farmer learning needs identified in 3.1, and pilot	1 month	X											
3.3	Roll out amended training modules and offer refresher training	8 month		X	X	X	X	X	X	X	X			
3.4	Review the governance structure and capacities of the INFA and identify priority development needs to enable scale-up, pending the anticipated new membership numbers.	1 month	X											
3.5	In consultation with INFA and the organic certifier, agree timeline and responsibilities for the certification process	2 days	X											
3.6	Train internal auditors				X									
3.7	<i>Milestone – Pre-audit of INFA members</i>					X								
3.8	Revise and update the INFA governance structures and financial control mechanisms				X	X	X	X						
3.9	Establish supply chain control points for rice and rice flour					X								
3.10	Set up and prepare for physical installation of flour mill				X									
3.11	Procure flour mill					X								
3.12	Deliver training on flour mill use and maintenance						X							
3.13	Develop and agree with INFA and Shan Maw Myae the detailed 3 year	1.5	X	X										

	business plan												
3.14	According to the business plan, identify the priority investments/ infrastructure/ capacities required and support INFA and Shan Maw Myae to address these	1.5			X	X							
3.15	According to business plan, establish local sales distribution systems for rice and rice flour	2				X	X						
3.16	Support INFA to produce and sell rice and rice flour	4						X	X	X	X	X	X
3.17	Base and end line surveys on household incomes and expenditures related to farming	2	X	X								X	X
Output 4	At least 1,000 households (c. 5,400 people) participate in community waste collection and safe disposal; at least 200 households (c.1,000 people/ approx. 50% of all HH in flood prone areas) benefit from improved sanitation systems in flood prone areas with eutrophication problems												
4.1	Develop a core team between Inn Chit Thu and Wetlands Work. Develop a HandyPod training programme for construction training and sanitation marketing using informational materials, presentations, workshops, field work, and demonstration sites	4	X	X									
4.2	ID and train local business operators from the target villages who serve the HandyPod's supply side elements	2		X									
4.3	Organise a Sanitation Raffle (lucky draw) for flood-prone households in each target village involving various leadership levels; promotion, prizes, events coordination	3		X	X								
4.4	Install winning HandyPods in dry season	6			X	X							

M	<i>Milestone: Pilot HandyPods installed and operating</i>					X							
4.5	Provide faecal sludge management guidance and demonstrations	2			X	X							
4.6	Monitor and evaluate initial target village strategies; adapt as needed	3					X	X					
4.8	Explore and specifically define broader scale up of sanitation activities around Lake Indawgyi	2							X	X	X	X	
4.9	Establish baseline information: nearshore pathogens (E. coli) and algal mat density in Year I wet and dry season	3	X			X						X	
4.10	Develop waste management awareness materials	1	X										
4.11	Implement waste management awareness campaign	10	X	X	X	X	X	X	X	X	X	X	
4.12	Facilitate establishment of village-based waste management systems, identify supply chain for recycling materials	6		X				X					
4.13	Establish village land fill sites for safe disposal of waste	4			X				X				
4.14	Provide support to the new waste collection system	9			X	X	X	X	X	X	X	X	X

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)

Regular project monitoring will include monthly financial reporting, quarterly and annual monitoring of project progress conducted by FFI in collaboration with project partners. FFI takes a theory of change approach to monitoring and evaluation, and tracks projects against their specific intended impact chain to assess project progress and identify any challenges early on. Data is disaggregated by gender to enable analysis of the differing impacts on women and men. In Myanmar, FFI has an in-country team of financial managers, accountants, internal auditors and technical experts to ensure professional monitoring and evaluation, with additional technical support from the UK head office.

To comply with organic farming certification procedures in export markets such as the European Union each producer (farm) unit has to be inspected and certified individually by an accredited independent certification body. Since this is economically impossible for most small-scale producers in developing countries, the project will facilitate group certification. This involves establishing an Internal Control System (ICS), which ensures that all individual farmers of the IOFA are inspected regularly and that the findings of these internal inspections are accurate and well documented. An external audit for group certification will be conducted when all farmers have practised organic farming for at least 2 consecutive years as required by international organic standards. Monitoring of the group will also look at its ability to manage financial and production processes. The business plan will also be used as a tool to monitor the commercial viability of the rice and flour sales.

Progress on community forestry and agroforestry will be monitored and evaluated at least quarterly by FFI's senior community forest expert and mid-term by an external community forestry expert with a focus on forest user group formation, nursery development, reforestation/ agroforestry success rate, community forestry management planning and certification.

Reduced pathogens (E-coli) and reduced littoral BOD during the flood season in nearshore water will be monitored by Wetland Works in year 3 after a sufficient number of households have adopted improved household sanitation. FFI will use annual UAV surveys to monitor algae growth in shallow lake shore areas adjacent to sanitation project villages.

To measure the effectiveness of collaborative patrolling and law enforcement the project will use the 'SMART' patrolling system which allows monthly monitoring of threats, wildlife encounters, and enforcement actions. SMART data analysis allows for an immediate adjustment of the patrolling and law enforcement system. A community-based informant network will also provide 'real time' information for adaptive law enforcement operations. FFI will use annual UAV mapping to monitor agricultural encroachment and illegal logging.

All monitoring and evaluation reports will be shared and reviewed by the Indawgyi Biosphere Reserve/ Wildlife Sanctuary management and Biosphere Reserve management committee.

Number of days planned for M&E	100 days
Total project budget for M&E	£14,000
Percentage of total project budget set aside for M&E	4.4%

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)

All procurement at FFI complies with our procurement policy or the donor regulations, whichever is more stringent. Procurement of any value is required to avoid conflict of interest and ensure value for money. Purchases of £3,000 upwards require quotations to be documented. Decisions may be made according to quality and safety as well as cost.

FFI works through local partners which reduces the need for expensive in-country operations, cutting overall overheads. The project is largely using FFI in-house expertise which is cheaper than consultants and ensures continuity of support.

The project will use public transport and if needed hire or lease vehicles or equipment rather than procurement which helps to reduce upfront costs and the need for maintenance and insurance, reducing the need for flights and travel costs by working with local partners and having staff based in the field.

The project builds on existing information and projects to enable a quick start up and reduce the need for baseline research.

The private sector partner Shan Maw Myae will provide technical services pro-bono and will guarantee fair prices to farmers for the purchase of organic rice.

Excellent market demand for rice flour justifies the procurement of a rice flour mill which adds significant value for members of the Indawgyi Natural Farmers Association.

Market-based approaches to household sanitation and 'user pays' principles for community based waste collection increases sustainability and ensures the efficient use of funds.

The project can easily be up-scaled and additional still unsecured co-financing can be used very efficiently to reach more beneficiaries.

The collaborative management approach and especially the establishment of an institutionalised Biosphere Reserve stakeholder management committee provide a cost effective framework for stakeholder inclusion in protected area management.

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)

One large capital purchase is anticipated through this award. FFI will support our partner INFA to procure a rice flour mill, to add value to rice products that can move local rice growers up the value chain and enable them to command a high price for their products, addressing poverty and sustainability of livelihoods. The mill will be owned by INFA and maintained and insured by Shan Maw Myae. These arrangements will be detailed in a specific agreement/ contract which all relevant parties will sign. The mill will remain in this ownership arrangement and in use beyond the duration of this particular project.

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 total: £ XXX,XXX

Helmsley/ NORAD: £ XX,XXX (focus: organic farming/ agroforestry/ community forestry) ASEAN Centre for Biodiversity: £ XX,XXX (focus on protected area management)

27b) Unsecured

Provide details of any matched funding where an application has been submitted, or that you intend applying for during the course of 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

27c) None

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

(max 100 words)

N/a

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)

FFI has a zero-tolerance approach to bribery and our anti-bribery policy is compliant with the Bribery Act (2010). The policy applies to all Members of Council, all FFI employees, volunteers, consultants, contractors, partners and any other person associated with FFI. FFI procedures address the following areas related to bribery: Direct payments; Facilitation payments; Payments under duress; Gifts and hospitality; Partners; Suppliers, contractors and other 3rd parties; Procurement; Conflicts of interest; Political donations; Whistle-blowing.

Financial risks specific to this project and their rating are:

Misuse, corruption and fraud by participating partners or other project implementers: Low risk.

FFI has a long history of collaboration with stakeholders in Indawgyi. Our projects have not encountered corruption or misuse of funds. FFI has standard operating procedures in place for management of small grants to local community groups and has strong internal financial management and project audit systems.

Macro-economic stability/ regional threats to security. Low-medium risk.

Rapid economic growth rate in Myanmar is predicted to continue for the duration of the project. Despite potential political and ethnic conflict in Myanmar, overall macro-economic stability is likely to remain good. Ethnic conflict could impact project implementation however Indawgyi has remained stable despite conflicts elsewhere in Kachin state.

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)

Certification

On behalf of the trustees of

Fauna & Flora International

I apply for a grant of £ 329,590 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)	Joanna Elliott
Position in the	Senior Director, Conservation Partnerships

Signed**

Date:

29/01/2018

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
Have you checked the Darwin website immediately prior to submission to ensure there are no late updates?	Yes

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.