



Submit by Monday 24 October 2011

## DARWIN INITIATIVE APPLICATION FOR GRANT FOR ROUND 18: STAGE 2

Please read the Guidance Notes before completing this form. 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.

### 1. Name and address of organisation (NB: Notification of results will be by post to the Project Leader)

<b>Name:</b> Blue Ventures	<b>Address:</b> AH309AB, Aberdeen Centre, 22-24 Highbury Grove, London N5 2EA
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### 2. Project title (not exceeding 10 words)

Leveraging markets to conserve mangrove biodiversity and alleviate poverty in Madagascar
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### 3. Project dates, duration and total Darwin Initiative Grant requested, matched funding

Proposed start date: 1 April 2012		Duration of project: 3 years			End date: 31 March 2015	
<b>Darwin funding requested</b>	<b>2011/12</b> £	<b>2012/13</b> £ 80,252	<b>2013/2014</b> £ 75,986	<b>2014/15</b> £ 70,601	<b>2015/16</b> £	<b>Total</b> £ 226,840
<b>Proposed (confirmed and unconfirmed) matched funding as percentage of total Project cost:</b>						
Confirmed: £74,428						
Unconfirmed: £574,917						

### 4. Define the purpose of the project (extracted from logframe)

Coastal communities in western Madagascar are earning income from the sale of carbon credits, charcoal and timber that they supply through mangrove reforestation and sustainable forest management, so enabling them to improve their livelihoods and conserve mangrove forests in the long term.
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### 5. Principals in project. Please provide a one page CV for each of these named individuals. You may copy and paste this table if you need to provide details of more UK personnel or more than one project partner.

Details	Project Leader	Other UK personnel (working more than 50% of their time on project)	Main project partner and co-ordinator in host country/ies	
<b>Surname</b>	Harris	Cripps	Ravaoarinosiho arana	Andriamahefazafy
<b>Forename (s)</b>	Alasdair	Garth	Lalao Aigrette	Mialy Zanah
<b>Post held</b>	Research Director	Project Manager, Carbon Finance Specialist	Mangrove scientist	Environmental Solicitor & Policy Officer
<b>Institution (</b>				
<b>Department</b>				
<b>Telephone</b>				
<b>Email</b>				

6. Has your organisation received funding under the Darwin Initiative before? If so, please provide details of the most recent (up to 6 examples).

Reference No	Project Leader	Title

7. IF YOU ANSWERED 'NO' TO QUESTION 6 describe briefly the aims, activities and achievements of your organisation. (Large institutions please note that this should describe your unit or department)

**Aims (50 words)**

Blue Ventures is a marine conservation organisation that works with local communities to conserve threatened marine environments, both protecting biodiversity and alleviating poverty. The results of our work help us to propose new ideas to benefit coastal communities everywhere.

**Activities (50 words)**

BV is a social enterprise - innovating ways to financing marine conservation. Business models include [ecotourism](#), sustainable fisheries management and [aquaculture](#). BV provides [family planning](#) services to partner communities, as well as [scholarships](#) that ensure 100's of children are able to attend school. BV has also provided [marine science training](#) to over 50 Malagasy science graduates.

**Achievements (50 words)**

Together with the people of 25 villages, BV created [Velondriake](#) – Madagascar's first large-scale community managed marine protected area. BV has expanded this community management model to [50 other sites](#). BV has won awards for its entrepreneurial solutions for sustainable development, including: the SEED Award, the 2006 Equator Prize and the 2011 Buckminster Fuller Prize.

8. 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.

<b>Applicant institution and website where available:</b>	<b>Details (including roles and responsibilities and capacity to engage with the project):</b>
Blue Ventures <a href="http://blueventures.org/">http://blueventures.org/</a>	<p>The project management has significant experience in developing some of the world's pioneering REDD+ projects. These experiences have been drawn on in the conception of this project. In 2011, BV began a three-year research project to develop scientifically robust methods for the quantification of mangrove carbon stocks. This research programme will provide significant scientific support to the proposed project.</p> <p>The following staff will make significant inputs to the project:</p> <ol style="list-style-type: none"> <li>2. Dr Garth Cripps, Carbon finance specialist, BV; has 3 years of experience working on forest carbon projects in Madagascar, including 2 major VCS-CCBS REDD projects; he will manage the carbon finance aspects of the project, particularly the production of the PDD and business plan.</li> <li>3. Dr Trevor Jones, Remote sensing &amp; GIS scientist, BV; is a remote sensing scientist with a background in forestry management; he will be responsible for the RS &amp; GIS activities of the project required for the PDD and monitoring.</li> <li>4. Lalao Aigrette, Mangrove PES researcher, BV; scientist who has experience in measuring mangrove carbon stocks, as well as in the community management and participatory monitoring of mangroves and will provide essential oversight to these aspects of the project. She is also trained in the restoration of mangroves.</li> <li>5. Mialy Andriamahefazafy, Malagasy environmental solicitor, BV; a solicitor who has experience with securing land tenure in Madagascar; she will also oversee the establishment of carbon rights and benefit sharing mechanisms.</li> <li>6. Bienvenue Zafindrasilivonona, Community forestry officer, BV, Ambaro Bay; socioeconomic researcher and community liaison officer for the Velondriake community managed MPA since 2008; she has carried out her MSc research on mangrove habitats. She will oversee the implementation of all activities at the Ambaro Bay site, managing the community assistants and female teams, as well as working with the communities to establish mangrove management.</li> <li>7. Brian Jones, Madagascar project manager, BV; has worked for the last five years on agriculture and natural resource management in rural Madagascar, most recently in establishing mangrove reserves in the Kirinde Mite marine extension. He will be responsible for the management of the community aspects project, directly overseeing Bienvenue Zafindrasilivonona</li> </ol>

<p><b>Lead Partner and website where available:</b></p>	<p><b>Details (including roles and responsibilities and capacity to engage with the project):</b></p> <p>The lead partner of this project is Blue Ventures, Madagascar. The following staff will make significant inputs to the project:</p> <ol style="list-style-type: none"> <li>1. Lalao Aigrette, Mangrove PES researcher, BV; scientist who has experience in measuring mangrove carbon stocks, as well as in the community management and participatory monitoring of mangroves and will provide essential oversight to these aspects of the project. She is also trained in the restoration of mangroves.</li> <li>2. Mialy Andriamahefazafy, Malagasy environmental solicitor, BV; a solicitor who has experience with securing land tenure in Madagascar; she will also oversee the establishment of carbon rights and benefit sharing mechanisms.</li> <li>3. Bienvenue Zafindrasilivonona, Community forestry officer, BV, Ambaro Bay; socioeconomic researcher and community liaison officer for the Velondriake community managed MPA since 2008; she has carried out her MSc research on mangrove habitats. She will oversee the implementation of all activities at the Ambaro Bay site, managing the community assistants and female teams, as well as working with the communities to establish mangrove management.</li> <li>4. Brian Jones, Madagascar project manager, BV; has worked for the last five years on agriculture and natural resource management in rural Madagascar, most recently in establishing mangrove reserves in the Kirinde Mite marine extension. He will be responsible for the management of the community aspects project.</li> </ol> <p>The project will also benefit from the involvement of:</p> <p>Benjamin Ridder, <b>Honko</b>. - a Malagasy NGO that is dedicated to the conservation of mangroves. Honko has experience of restoring mangroves in southwestern Madagascar.</p> <p>Dr Harifidy Rakoto Ratsimba, the <b>Ecole Supérieure des Sciences Agronomiques - Forêts, Université d'Antananarivo (ESSA-Forêts)</b>. Dr Ratsimba has significant knowledge of forest management and is presently collaborating in BV's blue carbon research. The project will support 3 research students from ESSA.</p> <p><b>Johannes Ebeling</b> formerly worked as a Senior Manager of Ecosystem Markets for EcoSecurities, has a background in sustainable tropical forest management and is an internationally recognised expert on REDD+. He will supervise the project's carbon finance activities.</p> <p>Christopher Norton, <b>Hogan Lovells International</b>, is a solicitor with experience of carbon finance projects, who has offered <i>pro bono</i> assistance with the legal aspects.</p>
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<p><b>9a. Have you consulted stakeholders not already mentioned above?</b></p> <p><b>If yes, please give details:</b></p> <p>For almost a decade BV has supported and worked with communities to establish locally-managed marine areas (LMMAs) in western Madagascar. During the conception of this project, BV consulted three coastal community management associations - Velondriake (Atsimo Andrefanana), Be Andriake (Menabe) and Melaky Miaro ny Tontolo Iainana (Melaky).</p>	<p><input type="checkbox"/> Yes</p>
<p><b>9b. Do you intend to consult other stakeholders?</b></p> <p><b>If yes, please give details:</b></p> <p>An initial activity of this project will be to consult with the target groups so as to enable them to</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/></p>

define specific details of the implementation of the project activities. Community members participating in the project will carry out many of the project activities, as well as be involved in the monitoring of the project. The project is designed to fulfil the requirements of Free, Prior and Informed Consent.	
<b>9c. Have you had any (other) contact with the government not already stated?</b>	<b>No</b>
<b>If yes, please give details:</b>	
<b>9d. Will your project support any work in the UK Overseas Territories?</b>	<input type="checkbox"/> <b>No</b>
<b>If yes, please give brief details stating which Territory/ies will be involved.</b>	

**PROJECT DETAILS****10. Please provide a Concept note (Max 1,000 words) (repeat from Stage 1, with changes highlighted)****Problem**

Madagascar's mangrove forests are extremely valuable ecosystems, not only for the exceptional biodiversity that they support, but also for the host of ecosystem services and goods, critical to the well-being of coastal people, that they provide. Over half of Madagascar's population lives on the coast and mangroves play an important role in the well-being of many of these people, be they urban or rural. Yet, for the very reason that they provide so many valuable products, these mangroves are increasing deforested and degraded. There are a number of underlying causes of this:

1. In Madagascar, forests provide 100% of domestic energy needs in rural areas and over 70% of the total energy consumption of the country. 93% of logging is for firewood, charcoal or poles for local markets.
2. Ineffectual forest governance and failure of the land tenure system mean that forests are essentially open access resources. While local people may earn a meagre daily wage by logging and producing charcoal for outside middlemen, they have little control over their own forest resources.
3. The government's failure to manage forest resources means that market demand for forest products cannot be met from sustainable sources. The outlook is that the rapidly growing population of the west coast will continue to meet its needs by exploiting natural forests.
4. Despite the importance of country's mangroves, there are presently no effective, broad-scale management efforts taking place. To date, efforts have been concentrated on upland forests, mostly on the eastern humid rainforests.

The result is the widespread deforestation and degradation of mangroves that are accessible from urban markets. Other natural forests, which harbour globally important biodiversity, are also being rapidly deforested along the west coast, partly for farming, but also simply to produce charcoal.

**Project strategy and outcomes**

Mangrove timber is prized for its strength and durability; the wood has high energy content and is sort after for making charcoal. With the Malagasy population projected to double by 2050, market demand for such products will increase strongly. Tropical mangroves are amongst the most productive of all forest ecosystems and can sustain a high harvest if properly managed. Part of the demand for timber and charcoal could be met through the sustainable management of mangroves.

Furthermore there is now international recognition of the exceptional capacity of mangrove forests to sequester CO<sub>2</sub>, as well as the key role that they will play in climate change adaptation. There is the opportunity to gain financing for mangrove conservation from carbon markets (or from eventual REDD+ donor funds).

The aim of the project is to enable communities who are customary owners of mangroves to supply these markets using mangrove reforestation/afforestation (A/R) and sustainable forest management (SFM). The sale of carbon credits, charcoal and timber will provide substantial income to local people, and enable them to conserve primary mangrove habitats.

Local participants will themselves sell mangrove timber and charcoal directly to buyers. While most of the carbon revenues will be paid directly to participants, the project will retain a small part to cover long-term management expenses.

A key objective of the project is to develop a simple model that can be easily implemented by other communities throughout Madagascar. Development of the model will be done at two sites where BV already has a permanent presence. At the outset, BV will work with the communities to develop a mangrove management plan. This will include a participative zoning of the area into A/R, SFM and conservation areas. For each of these, clear and simple management regimes will be established and enshrined in local traditional law (*Dina*). A community management association will be responsible for the overall management of the area.

Since the mangrove area will comprise both newly created and existing forest, we will use two legal mechanisms to gain secure land and user rights for the participants:

- *Réserve Foncière pour le Reboisement* (RFR) combined with *certificat foncier* to give individuals land rights in the case of the A/R plots and some SFM areas;
- And *Gestion Contractualisée des Forêts* (GCF) to transfer natural resource management rights to the community in the case of existing community forest areas.

The project will train and continually support the participants in: mangrove A/R and SFM; monitoring of mangrove carbon stocks; sustainable and improved timber and charcoal production; and effective conservation of mangrove habitats.

In order to generate sellable carbon credits, we aim in the long term (beyond the three years of this project) to validate the community projects against the Verified Carbon Standard (VCS), as well as the CCBA standard. Since the mangrove areas will be discrete and dispersed, we will bundle these individual projects into a single Project Description for validation and verification.

The project will have the following outcomes:

1. Communities and individuals will have clear and uncontested land and user rights to their mangroves. Consequently these mangroves will no longer be open access;
2. Communities will be able to independently carry out mangrove A/R and SFM, produce sustainable charcoal and timber, and take carbon stock measurements;
3. Communities will earn income from the sustainable production of timber and charcoal, and the sale of carbon credits;
4. Market demand for timber and charcoal will be sustainably met from mangrove forests, rather than from the destruction of primary, biodiverse mangrove and upland forests.

In 2011, BV began a three-year research project to develop scientifically robust methods for the quantification of mangrove carbon stocks. This research programme will provide significant scientific support to the proposed project. The project will significantly benefit from BV's strong existing relations with the communities and experience of establishing effective community management. The NGO Honko will bring to the project their experience of successfully restoring mangroves in western Madagascar; ESSA Foret will contribute to the sustainable timber and improved charcoal production; Johannes Ebeling will provide guidance on carbon finance; and Hogan Lovells International will assist with all legal aspects of the carbon project.

#### **CBD/CMS/CITES**

The outcomes of the project will contribute to all three main objectives of the CBD, and in particular Articles 6, 8, 10 and 11.

#### **11a. Is this a new initiative or a development of existing work (funded through any source)?**

**Please give details:**

In early 2011 BV initiated a research programme that aims to establish the scientific foundation for mangrove REDD+ by quantifying the greenhouse gas emission reductions achievable through the conservation of mangrove habitats. This programme is supported by the Western Indian Ocean Marine Science Association (MASMA) and the MacArthur Foundation. The rigorous measurement

of mangrove REDD+ emission reductions is prerequisite to accessing carbon finance for mangrove conservation. The research will make a vital contribution to the project proposed here by providing the science necessary for the project to eventually access the carbon markets. On the other hand, the proposed project will allow us to establish the essential community-based actions for the development of a REDD+ project, as well as to innovate other ways of generating incomes from sustainable mangrove forest management.

**11b. Are you aware of any other individuals/organisations/ projects carrying out or applying for funding for similar work?**  No

**11c. Are you applying for funding relating to the proposed project from other sources?**  Yes

**If yes, please give brief details including when you expect to hear the result. Please ensure you include the figures requested in the spreadsheet as Unconfirmed funding.**

BV has developed two other funding applications related to this proposal, namely:

- 1. Waterloo Foundation** The proposed project is entitled: "Developing a mangrove payment for ecosystem services scheme: leveraging private sector investment to alleviate poverty and conserve coastal biodiversity". The project aims to use broad-scale, effective community management to enhance the stocks of mangrove crab and shrimp fisheries. BV will work together with a private enterprise (UNIMA) to establish this project. The project is distinct but complementary to this Darwin proposal in that it is focussed on mangrove fisheries, but will build community management of mangroves with the long term view of combining this with REDD+ activities for mangroves. The Waterloo Foundation selection committee will assess this proposal in early November 2011, but have no fixed date by which they will respond.
- 2. DFID, Global Poverty Action Fund (GPAF) – Innovation Window** BV submitted a full proposal with a local Madagascar partner (Honko, an NGO focussed on mangrove conservation) to DFID on the 10 October 2011. The proposal is entitled "Turning mangrove forest restoration and conservation into a viable business for the coastal people of western Madagascar" and is essentially the same as the project presented here, but aims to . We expect to hear a response to the DFID application late December 2011.

**12. Please indicate which of the following biodiversity conventions your project will contribute to: -**

At least one must be selected.

- Only indicate the conventions that your project is directly contributing to.

- No additional significance will be ascribed for projects that report contributions to more than one convention

Convention on Biological Diversity (CBD)  Yes

CITES  No

Convention on Migratory Species (CMS)\*  No

**Is any liaison proposed with the CBD/CMS/CITES focal point in the host country?**  Yes  No  
**If yes, please give details:**

The project will work closely with Madagascar's Designated National Authority (DNA) in developing the carbon project. The DNA is part of the ministry overseeing the environment and forests, and so falls within the same government structure as Madagascar's CBD focal point.

**What specific issues covered by the Convention(s) will this project address and how were they identified? (150 words)**

The extensive mangroves of the western coast support several Critically Endangered species, including the Madagascar fish eagle, the Madagascar Teal and possibly the last populations of two species of sawfish in the Western Indian Ocean. These mangroves are also fundamental to the

health of the extensive coral reefs that occur along the West coast. By contributing to the preservation of this significant biodiversity, the project will help Madagascar to fulfil the first main objective of the CBD.

Through enabling communities to earn long-term income from the sustainable use of mangroves, through equitable sharing of carbon revenues and building local capacity to participate in REDD+, the project will help to fulfil the other two main objectives of the CBD.

In summary the outcomes of the project will contribute to all three main objectives of the CBD, and in particular Articles 6, 8, 10 and 11.

**What will change as a result of this project? (150 words)**

The beneficiaries, particularly to women, will earn new and long-term income from the sale of carbon credits, charcoal and timber that they supply through mangrove reforestation and sustainable forest management. Diversifying cash income away from just fishing will help to eradicate deep poverty in these communities. In addition they will gain legal land and user rights to their mangroves; the productivity of the natural resource base upon which they depend will be maintained; and their resilience to climate change will be enhanced. The project will directly benefit the 2,800 people of the communities where it will be implemented.

**Why is the project important for the conservation of biodiversity? (150 words)**

In addition to protecting the unique biodiversity that mangroves in Madagascar support, both directly (described above), the project will make the following additional important contributions to the conservation of biodiversity:

- The project will innovate a model that generates near-term income streams from two commercially-valuable products that community management of mangrove ecosystems can deliver and for which there is already a strong market demand. It will allow bring tangible benefits to the community on a short time horizon and so build broader community support for the longer term mangrove management required for REDD+.
- It will develop mechanisms through which coastal communities can equitably benefit from REDD+ finance, so contributing to forest conservation and poverty alleviation.
- It will build Malagasy capacity at both a scientific and community level to participate meaningfully in REDD+, particularly with a view to preserving biodiversity and supporting its sustainable use.

**13. How will the results of the project be disseminated; how will the project be advertised as a Darwin project and in what ways will the Darwin name and logo be used? (max 200 words)**

BV is working with a range of partners to establish a network of LMMAs in Madagascar. Through this network we plan to promote and replicate the successes this project achieves. In addition to establishing a national LMMA network for Madagascar, the project is working with other LMMAs throughout the western Indian Ocean to establish a virtual LMMA network for the sharing of information and practices. The network will possibly be connected to the LMMA Network in the Asia / Pacific region. Through these medium we will work to share the results of the project.

Finally BV has a current project that is developing training and educational material for LMMAs by drawing from actual experiences and practices of local communities. The approach uses photographs, video and sound to record villagers putting into practice conservation and development actions. This material is brought together to tell a clear, how-to story that other local communities can understand. BV is disseminating the material through a website, through mobile phones, free CDs and printed material, as well as other NGOs. Certain aspects of this project will be made available to a wide range of community audiences and local managers through this project.

The project will be publicised and promoted through local and national media in both the UK and Madagascar, as well as through BV's website and quarterly newsletters.

When promoting and sharing the lessons learnt of this project through the above ways, we will fully acknowledge the support of the Darwin Initiative and make appropriate use of the logo.

**14. What will be the long term benefits (particularly for biodiversity and local communities) of the project in the host country or region and have you identified any potential problems to achieving these benefits? (max 200 words)**

The target communities show the characteristics of deep poverty in Madagascar, including: a high birth rate; a large household size; and high dependence on open-access resources that are degraded. The region where the target groups live has Human Development Indices that are well below the national averages, as well as the weakest progress in all dimensions of human development (UNDP 2006)).

Environmental sustainability is critical to the livelihoods of these resource-dependent populations. Yet national analysis of deforestation shows that this region has experienced the highest rates of deforestation between 1990 – 2005 (CI 2009). Analysis of mangrove deforestation from 2000 to 2010 shows that the net loss of mangroves is equally high (Jones, 2011 in prep.). The coral reefs and associated fisheries of the region are similarly in a strong downward trajectory (Harris, 2009).

Madagascar is ranked amongst tropical countries with the lowest adaptive capacity to climate change, combined with very high vulnerability (Burke 2011); a recent forecast of the threats of climate change across the western Indian Ocean shows particularly dramatic changes in Madagascar by 2030 (Ateweberhan 2010). Climate change is therefore set to exacerbate the already difficult predicament of Malagasy coastal communities.

If biodiversity is to be conserved in western Madagascar, and if coastal fishing communities are to be able to cope with climate change, there is an urgent need to sustainably manage the mangrove forest resources on an ecologically meaningful scale in the region. This project will make an important step towards achieving this goal.

**15. 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 majority of staff employed by the project will be Malagasy; many will be community members. The project specifically aims to harness strong local markets to provide sustainable income and motivate communities to undertake A/R, SFM and conservation. Furthermore, it will use carbon finance to provide long-term (30 – 60 years) income, part of which will be used to cover management costs. For these reasons, the project is inherently sustainable and should continue to contribute towards its outcomes well beyond the funding period.

The project will pioneer a business model that is profitable to local people, providing them with three income streams. It is simple and can be largely implemented by local people themselves (excluding the carbon project aspects). Strong and growing market demand for the products that it supplies will drive the replication of the model to a meaningful scale. Furthermore, it will use part of the carbon income to cover its own long-term management costs. With as much as 4,000 km<sup>2</sup> of mangroves bordering the western coast, Madagascar has Africa's third largest mangrove forest area – the potential for having a broad impact on poverty is significant.

**16. If your project includes capacity building in local communities in the host country, please indicate how you will assess the training needs in relation to the overall purpose of the project. Who are the target groups? How will the training be delivered? What skills and knowledge you expect the beneficiaries to obtain and how these may be used beyond the life of the project and any wider application How will you measure training effectiveness. (max 300 words)**

You should address each of these points.

In order to fulfil the project's objectives, it will be necessary to train the community participants in to take measurements for carbon stocks, forest inventories, sustainable mangrove forestry management, mangrove restoration and charcoal production using improved kilns. In addition, during the initial community consultation phase of the project to fully define the implementation of the community actions, the community participants will identify training needs that they require to make the project successful. These training needs will be addressed by the project staff and BV's wider technical staff base if necessary.

The project will form teams of women who will be trained and employed to take carbon stock measurements and forestry inventories, as well as in running the nurseries, mangrove planting and initial maintenance of restoration plots. The project will provide formal training to the women through workshops, reinforced by carrying out the job with the close supervision of BV staff over the entire duration of the project. The vision of the project is that revenues from carbon offsets will be used to cover the costs of continuing these activities long term.

In a similar fashion the wider community participants will be trained in sustainable forestry management, mangrove restoration and charcoal production. Firstly, through training workshops using material aimed at their level of education; secondly, through learning by doing with continued technical support of BV staff. Given the market demand for timber and charcoal, the skills that community participants gain here will find wider application beyond the scope of the project.

**LOGICAL FRAMEWORK**

17. Please enter the details of your project onto the matrix using the note at Annex 3 of the Guidance Note. This should not have substantially changed from the Logical Framework submitted with your Stage 1 application. Please highlight any changes. (Use no smaller than Arial 10 pt)

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<b>Goal:</b> Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.			
<b>Sub-Goal:</b>  Conservation of Madagascar's mangrove habitats and their associated biodiversity	<ul style="list-style-type: none"> <li>Deforestation rates for natural forest habitats of the coastal districts of western Madagascar</li> <li>% of charcoal and timber that comes from the deforestation of natural forests of the coastal districts of western Madagascar</li> </ul>	<ul style="list-style-type: none"> <li>Existing CI-MEFT-USAID National deforestation analysis for 1990-2000-2005; present BV &amp; literature analyses of mangrove deforestation; future national deforestation analyses that CI-MEFT plan to undertake</li> <li>Existing CI, USAID &amp; WWF reports on timber &amp; charcoal consumption in coastal areas; future participative appraisals &amp; research</li> </ul>	
<b>Purpose</b>  Coastal communities are earning income from the sale of carbon credits, charcoal and timber that they supply through mangrove reforestation and sustainable forest management, so enabling them to improve their livelihoods and conserve mangrove forests in the long term.	<ul style="list-style-type: none"> <li>Increase in household revenues (male, female) from charcoal, timber and carbon credits*</li> <li>Area (ha) of restored and conserved mangrove forest that is under effective community management</li> </ul>	<ul style="list-style-type: none"> <li>Sales figures of charcoal and timber (from participative appraisals done to establish mangrove management plans &amp; uses; project records of sales)</li> <li>Household revenues, disaggregated by sex</li> <li>Project GIS, land titles and community management contracts</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable mangrove timber and charcoal is competitive with those from other sources</li> <li>Adequate, long term market demand exists for such carbon offsets (or strong donor commitment to REDD+ continues)</li> </ul>
<b>Outputs*</b>  1. Communities have clear and uncontested land and user rights to their customary mangrove areas; and give their Free Prior & Informed Consent to use these areas for a	<ul style="list-style-type: none"> <li>Area (ha) with secure title (RFRs and GCFs)</li> <li>Number of individuals (male, female) with formalised user &amp; carbon rights</li> </ul>	<ul style="list-style-type: none"> <li>Government cadastral records</li> <li>Land titles and community conservation contract agreements</li> <li>Project GIS</li> </ul>	<ul style="list-style-type: none"> <li>No significant land disputes exist so that uncontested ownership can be established</li> <li>If there are land disputes, these can be resolved</li> </ul>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
forest carbon project	<ul style="list-style-type: none"> <li>Decrease in the incidence of forest exploitation by outsiders</li> </ul>	<ul style="list-style-type: none"> <li>Community management association records</li> </ul>	<ul style="list-style-type: none"> <li>The legal formalisation of user and carbon rights using existing instruments does not marginalise women</li> </ul>
2. Communities have established mangrove A/R, SFM and conservation areas; and are competently managing these areas	<ul style="list-style-type: none"> <li>Area of mangrove planted</li> <li>Area of mangrove under SFM and conservation regimes</li> <li>% of sites implementing clear management plans and which have sustainable harvesting quotas &amp; rotations set according to output 4</li> <li>Participative monitoring shows a decrease in uncontrolled harvesting of mangroves</li> </ul>	<ul style="list-style-type: none"> <li>Participative maps in community management contracts; project GIS of community management areas</li> <li>Planting &amp; maintenance schedule; project GIS of planted areas</li> <li>Community monitoring data books</li> </ul>	<ul style="list-style-type: none"> <li>Residents can forego immediate exploitation of mangroves long enough to begin earning from A/R and SFM</li> <li>The community participants agree to robust enough management plans</li> <li>Growth cycles of target mangrove tree species allow adequate production of seedlings within project schedule</li> </ul>
3. Communities are producing sustainable charcoal and timber*	<ul style="list-style-type: none"> <li>All participants have been trained in SFM and improved charcoal production</li> <li>% of sites where timber is harvested according to the sustainable quotas &amp; rotations defined in the management plans</li> <li>Number of improved charcoal production units in place</li> </ul>	<ul style="list-style-type: none"> <li>Training workshop reports</li> <li>Carbon monitoring for each site; verification of rotational harvesting by BV project staff; checked monthly</li> <li>Existence &amp; use of improved kilns within the target sites as verified by BV staff; project reports</li> </ul>	<ul style="list-style-type: none"> <li>The combination of individual ownership of A/R and SFM plots with the collective management associations is effective in preventing unsustainable harvesting</li> </ul>
4. The carbon stocks and harvestable timber of the community mangroves have been measured and are being accurately monitored	<ul style="list-style-type: none"> <li>% of community management units that have been trained to take carbon measurements and have a functioning monitoring team</li> <li>Biomass and soil carbon measurements have been taken at all sites</li> <li>Quality controls by BV scientists show less than 10% error in the carbon stocks measurements for all sites</li> <li>% of sites for which complete monitoring reports are archived in a central project database</li> </ul>	<ul style="list-style-type: none"> <li>Training workshop reports &amp; Standard Operating Procedures</li> <li>Carbon stock calculations</li> <li>Quality Control reports</li> <li>Project archive; 1st measurements taken by month 9; monitoring checked monthly</li> </ul>	<ul style="list-style-type: none"> <li>Adequate project finance can be gained from carbon revenues or other sources to support long term monitoring</li> </ul>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
5. The requirements for a forest carbon project that will generate carbon offsets are fulfilled	<ul style="list-style-type: none"> <li>• The government &amp; Designated National Authority (DNA) support the project &amp; are involved in its development</li> <li>• A Project Idea Note (PIN) &amp; business plan prove the viability of the carbon project</li> <li>• A draft Project Design Document (PDD) is written</li> </ul>	<ul style="list-style-type: none"> <li>• Formal letter of support from the government (DNA) for the project</li> <li>• Project Idea Note &amp; business plan submitted to investors</li> <li>• Draft Project Design Document</li> </ul>	<ul style="list-style-type: none"> <li>• A suitable approved methodology specific to mangroves is available by 2014 (this process has already begun, and a CDM A/R methodology has been recently approved)</li> <li>• Formal government support to the project is not jeopardized by changes in government</li> </ul>

Note: \* - these project outputs will not necessarily be fully realised within the three years of the requested funding given that forest carbon projects normally work on a 5-year verification cycle and can take several years to be developed; 1<sup>st</sup> generation planted trees will take several years to attain a harvestable size

18. 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.

Activity	No of Months	Year 1				Year 2				Year 3			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.1 Consultation & project development with the communities so as to fulfil the conditions of gaining their Free, Prior and Informed Consent (FPIC) for the implementation of a forest carbon project	11 (100%, over 3 yrs)		Initial stakeholder consultation with all potential participants finished				All community participants have been made fully aware of the forest carbon project & its implications				All community participants (male & female) have given their FPIC		
1.2 Detailed analyses of land tenure and use rights of the potential mangrove areas with both the government cadastral services and the local communities; and resolution of conflicts	8 (100%, yr 1)	Analyses of official tenure for all sites are finalised		Participative analysis of tenure & use rights for all sites finished; any conflicts identified		Any conflicts are resolved							
1.3 Establishment of legal user and carbon rights for community members participating in the project	12 (100%, yrs 1,2)				25% of community participants have formal user rights	50% of community participants have formal user rights	100% of community participants have formal user rights						
2.1 Establishment of community management plans, zonings and sustainable harvest quotas	9 (100% yrs 1, 2) 21 (50%, yrs 2, 3)			Participative mapping for management finished in all participating communities		50% of sites have agreed on clear management plans and sustainable harvesting regimes	100% of sites have agreed on clear management plans and sustainable harvesting regimes						
2.2 Establishment and maintenance of mangrove nurseries by female teams	6 (100%, yr 2) 18 (50%, yrs 1,2)				Female teams are created & trained in nursery management at all sites	50% of sites have functioning nurseries	100% of sites have functioning nurseries						

Activity	No of Months	Year 1				Year 2				Year 3			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2.3 Mangrove planting and maintenance of seedlings by female teams	6 (100%, yr 2) 12 (50%, yr 3)							750 ha planted with mangrove seedlings		1,500 ha planted with mangrove seedlings		2,500 ha planted with mangrove seedlings	
3.1 Training of the community participants in sustainable harvesting and improved management; initial timber harvesting according to sustainable quotas and planned rotations	2 (100%, yr 2) 18 (50%, yrs 2,3)						All sites have clear quotas & rotation plans & are trained		Monitored harvesting done at 50% of sites		Monitored harvesting done at 100% of sites		
3.2 Training of community members in the production of charcoal using improved kilns; initial production of charcoal using improved kilns; continued technical support	4 (100%, yr 2) 16 (50%, yrs 2,3)						Training & improved kilns at 50% of sites		Training & improved kilns at 100% of sites		Improved kilns are operational		
3.3 Linking of sellers to urban buyers through simple mobile phone messaging	1 (100%, yr 2) 6 (50%, yr 2)					List of mobile phones of all potential buyers made			Simple SMS network between buyers & sellers established for 50% of sites		Simple SMS network between buyers & sellers established for 100% of sites		
4.1 Development of a measurement & monitoring plan which meets the requirements of the selected approved methodology for the generation of carbon offsets (this monitoring will include mangrove planting, timber harvesting & charcoal production)	2 (100%, yr 1)	applicable approved methodology selected	required monitoring plan is developed	monitoring plan is in place (month 6)									
4.2 Creation & training of female monitoring teams in the use of appropriate forest inventories, carbon stock measurements and monitoring protocols	4 (100% yr 1) 24 (50%, yrs 2,3)		Female monitoring teams are created at all sites	All monitoring teams have been trained	All monitoring teams have finished initial stock assessments								
4.3 Stock measurements, continuous monitoring and analysis of the data; integration into management plans;	3 (100%, yr 1) 24 (50%,			Carbon stock measurements	Carbon stock measurements	Carbon stock measurements							

Activity	No of Months	Year 1				Year 2				Year 3			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
and continued technical support & quality control by BV scientists	yr 2,3)			nts have been taken for 25% of sites	nts have been taken for 50% of sites	nts have been taken for 100% of sites							
5.1 Consultation with the government & Designated National Authority (DNA) in the project development; gaining of DNA support for the project	0.5 (100%, yrs 1 – 3) 6 (50%, yrs 1- 3)		DNA consulted				PDD draft presentation to DNA			Formal approval gained			
5.2 Production of a Project Idea Note (PIN) and business plan based on actual monitoring; submission to investors / funders	4 (100%, yrs 1,3) 6 (50%, 2,3)					Feasibility assessment & PIN finalised		Initial business model developed			Business plan finalised		
5.3 Production of monitoring reports and a draft project design document	9 (100%, yrs 1- 3) 23 (50%, yrs 1- 3)		eligibility of lands & additionality proven				initial PDD draft						final draft PDD for pre-validation

Bar chart of the project activities

	Year 1												Year 2												Year 3												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
<b>ACTIVITY 1.1</b>																																					
Consultation & project development with the communities so as to gain their free, prior and informed consent for the implementation of the forest carbon project																																					
<b>ACTIVITY 1.2</b>																																					
Detailed analyses of land tenure and use rights of the potential mangrove areas with both the government cadastral services and the local communities																																					
<b>ACTIVITY 1.3</b>																																					
Establishment of legal user and carbon rights for community members participating in the project & conflict resolution																																					
<b>ACTIVITY 2.1</b>																																					
Development of a measurement & monitoring plan which meets the requirements of the selected approved methodology for the generation of carbon offsets																																					
<b>ACTIVITY 2.2</b>																																					
Creation & training of female monitoring teams in the use of appropriate forest inventories, carbon stock measurements and monitoring protocols																																					
<b>ACTIVITY 2.3</b>																																					
Stock measurements, continuous monitoring and analysis of the data; integration into management plans; and continued technical support & quality control by BV scientists																																					
<b>ACTIVITY 3.1</b>																																					
Establishment of community management plans, zonings and sustainable harvest quotas																																					
<b>ACTIVITY 3.2</b>																																					
Establishment and maintenance of mangrove nurseries by female teams																																					
<b>ACTIVITY 3.3</b>																																					
Mangrove planting and maintenance of seedlings by female teams																																					
<b>ACTIVITY 4.1</b>																																					



**19. Please indicate which of the following Standard Measures you expect to report against by providing indicative figures. These will help gauge project achievements if you receive funding. You will not necessarily plan to cover all these Standard Measures in your project.** Separate guidance on Standard Measures can be found at [http://darwin.defra.gov.uk/resources/reporting/standard\\_measures/](http://darwin.defra.gov.uk/resources/reporting/standard_measures/)

Standard Measure	Description	Estimate
1A	Number of people to submit thesis for PhD qualification (in host country)	
1B	Number of people to attain PhD qualification (in host country)	1
2	Number of people to attain Masters qualification (MSc, MPhil etc)	2
3	Number of people to attain other qualifications (ie. Not outputs 1 or 2 above)	
4A	Number of undergraduate students to receive training	
4B	Number of training weeks to be provided	
4C	Number of postgraduate students to receive training	
4D	Number of training weeks to be provided	
5	Number of people to receive at least one year of training (which does not fall into categories 1-4 above)	2
6A	Number of people to receive other forms of education/training (which does not fall into categories 1-5 above)	30 women 30 men
6B	Number of training weeks to be provided	5
7	Number of (ie different types - not volume - of material produced) training materials to be produced for use by host country	
8	Number of weeks to be spent by UK project staff on project work in the host country	18
9	Number of species/habitat management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country	1
10	Number of individual field guides/manuals to be produced to assist work related to species identification, classification and recording	1
11A	Number of papers to be published in peer reviewed journals	3
11B	Number of papers to be submitted to peer reviewed journals	
12A	Number of computer based databases to be <b>established</b> and handed over to host country	
12B	Number of computer based databases to be <b>enhanced</b> and handed over to host country	
13A	Number of species reference collections to be <b>established</b> and handed over to host country(ies)	
13B	Number of species reference collections to be <b>enhanced</b> and handed over to host country(ies)	
14A	Number of conferences/seminars/ workshops to be <b>organised</b> to present/disseminate findings	
14B	Number of conferences/seminars/ workshops <b>attended</b> at which findings from Darwin project work will be presented/ disseminated.	3
15A	Number of national press releases in host country(ies)	3
15B	Number of local press releases in host country(ies)	6
15C	Number of national press releases in UK	3
15D	Number of local press releases in UK	
16A	Number of newsletters to be produced	6
16B	Estimated circulation of each newsletter in the host country(ies)	
16C	Estimated circulation of each newsletter in the UK	10,000
17A	Number of dissemination networks to be <b>established</b>	
17B	Number of dissemination networks to be <b>enhanced/ extended</b>	
18A	Number of national TV programmes/features in host country(ies)	
18B	Number of national TV programmes/features in UK	
18C	Number of local TV programmes/features in host country(ies)	
18D	Number of local TV programmes/features in UK	
19A	Number of national radio interviews/features in host county(ies)	3
19B	Number of national radio interviews/features in UK	
19C	Number of local radio interviews/features in host country(ies)	8
19D	Number of local radio interviews/features in UK	
20	Estimated value (£'s) of physical assets to be handed over to host country(ies)	
21	Number of permanent educational/training/research facilities or organisations to be established and then continued after Darwin funding has ceased	
22	Number of permanent field plots to be established during the project and continued after Darwin funding has ceased	
23	Value of resources raised from other sources (ie in addition to Darwin funding) for project work	£300,000

## PROJECT BASED MONITORING AND EVALUATION

**20. Describe, referring to the Indicators in the Logical Framework, how the progress of the project will be monitored and evaluated, including towards delivery of its outputs and in terms of achieving its overall purpose. This should be during the lifetime of the project and at its conclusion. Please include information on how host country partners will be included in the monitoring and evaluation.**

Monitoring and evaluation will be conducted according to the Log Framework developed for the project. The project purpose, related outputs, measurable indicators and means of verification are detailed in this log frame.

An output of the project is to develop and enact a rigorous monitoring plan that meets the VCS standards conditions for project validation and verification. This monitoring plan will provide the key indicators required for M&E of the project (recorded in the monitoring plans and Project Design Document). A component of the monitoring plan is to train women from the participant communities to undertake the monitoring. The participation of the female community members in the project monitoring will ensure that their needs are reflected in the M&E.

The progress of the project towards achieving its outputs will be monitored against the project timetable of activities finalised at the project outset, as well as against detailed work plans and targets established at the beginning of every quarter by the project management. BV will undertake annual internal evaluations of the project's impacts according to the Darwin Initiative's reporting periods. These evaluations will be performed by the BV's central management together with the staff managing the project full-time. The results of the evaluations will be used to ensure that the project is more efficient and effective in achieving its desired results, with design and implementation strategies being adjusted if necessary.

A long-term objective of the project is to have it validated and verified by a third party accredited auditor against the VCS and CCBS standards. This will provide a rigorous and transparent assessment of whether the project has fulfilled its climate, community and biodiversity goals.

## FUNDING AND BUDGET

**Please complete the separate Excel spreadsheet which will provide the Budget information for this application. Some of the questions below refer to the information in this spreadsheet.**

**NB: Please state all costs by financial year (April to March). Use current prices – and include anticipated inflation, as appropriate, up to 3% per annum. The Darwin Initiative cannot agree any increase in grants once awarded.**

**21. How is your organisation currently funded? (max 100 words)**

BV is currently funded by a number of donors, including: the MacArthur Foundation, the Toyota Foundation, Norges Vel, USAID, UNFPA, UNICEF and RARE Conservation. Income from Blue Ventures' ecotourism activities is used to cover London costs as well as to fund conservation activities in Madagascar.

**22. Provide details of all confirmed funding sources identified in the Budget that will be put towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity. Please include any additional unconfirmed funding the project will attract to carry out addition work during or beyond the project lifetime. Indicate those funding sources which are confirmed.**

**Confirmed:**

The MacArthur Foundation: £56,733  
Blue Ventures: £17,695

**Unconfirmed:**

Applications have been submitted to the Waterloo Foundation and the DFID, Global Poverty Action Fund for related projects, both aiming to establish mangrove payment for ecosystem services schemes. The details of these projects are presented in section 11c.

Waterloo Foundation, we have requested funding towards a total project budget of £ 368,159. The Waterloo Foundation will only fund part of the total.

DFID, Global Poverty Action Fund, amount requested: £ 206,758

**23. Please give details of any further resources (confirmed or unconfirmed) for this project that are not already detailed in the Budget or Question 22. This will include donations in kind or un-costed support eg accommodation. (max 50 words per box)**

**Possible additional financial resources (not yet applied for):**

**Funding in kind:**

UNIMA (Aqualma) is a major shrimp exporter that has achieved a French sustainable certification for its shrimp aquaculture. It is also well-recognised for a number of sustainable development actions that it has taken in carrying out its aquaculture business, including community development projects in mangrove areas. BV has established a partnership with UNIMA and they will provide some logistical support to the north western project sites.

**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 the local UK embassy or High Commission directly to discuss security issues (see Guidance Notes) and attach details of any advice you have received from them.

Yes (no written advice)

Yes, advice attached

No

**CERTIFICATION 2011/12**

On behalf of the company of Blue Ventures

(\*delete as appropriate)

I apply for a grant of £ 226,840 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 lead UK institution to submit applications and sign contracts on their behalf.*)

**I enclose CVs for project principals and letters of support. Our most recent audited accounts and annual report are also enclosed:**

<b>Name (block capitals)</b>	Alasdair Harris
<b>Position in the organisation</b>	Research Director

**Signed**



**Date:**

24 October 2011

## Stage 2 Application - Checklist for submission

	Check
Have you provided actual start and end dates for your project?	
Have you provided your budget based on UK government financial years ie 1 April – 31 March?	
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?	
Is the concept note within 1,000 words?	
Is the logframe no longer than 3 pages and have you highlighted any changes since Stage 1?	
Has your application been signed by a suitably authorised individual? (clear electronic or scanned signatures are acceptable in the email, but a wet signature should be provided in the hard copy version)	
Have you included a 1 page CV for all the Principals identified at Question 5?	
Have you included a letter of support from the <u>main</u> overseas partner(s) organisations identified at Question 5?	
Have you checked with the FCO in the project country/ies and have you included any evidence of this?	
Have you included a copy of your most recent annual report and accounts? An electronic link to a website is acceptable.	
Have you read the Guidance Notes ?	
Have you checked the Darwin website immediately prior to submission to ensure there are no late updates?	

Once you have answered Yes to the questions above, please submit the application, not later than midnight GMT on Monday **24 October 2011** to [Darwin-Applications@ltsi.co.uk](mailto: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**. However, 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). **In addition**, a hard copy of the signature page should be submitted to Darwin Applications, c/o LTS International, Pentlands Science Park, Bush Loan, Penicuik EH26 0PL **postmarked** not later than Tuesday 25 October 2011.

DATA PROTECTION ACT 1998: Applicants for grant funding must agree to any disclosure or exchange of information supplied on the application form (including the content of a declaration or undertaking) which the Department considers necessary for the administration, evaluation, monitoring and publicising of the Darwin Initiative. Application form data will also be held by contractors dealing with Darwin Initiative monitoring and evaluation. It is the responsibility of applicants to ensure that personal data can be supplied to the Department for the uses described in this paragraph. A completed application form will be taken as an agreement by the applicant and the grant/award recipient also to the following:- putting certain details (ie name, contact details and location of project work) on the Darwin Initiative and Defra websites(details relating to financial awards will not be put on the websites if requested in writing by the grant/award recipient); using personal data for the Darwin Initiative postal circulation list; and sending data to Foreign and Commonwealth Office posts outside the United Kingdom, including posts outside the European Economic Area. Confidential information relating to the project or its results and any personal data may be released on request, including under the Environmental Information Regulations, the code of Practice on Access to Government Information and the Freedom of Information Act 2000.