



Submit by 13 January 2006

**DARWIN INITIATIVE APPLICATION FOR GRANT ROUND 14 COMPETITION:STAGE 2**

Please read the Guidance Notes before completing this form. Applications will be considered on the basis of information submitted on this form and you should give a full answer to each question. Please do not cross-refer to information in separate documents except where invited on this form. The space provided indicates the level of detail required. Please do not reduce the font size below 11pt or alter the paragraph spacing. Keep within word limits.

**1. Name and address of organisation**

<b>Name:</b> Coral Cay Conservation	<b>Address:</b> Coral Cay Conservation Ltd Ground Floor, 40 - 42 Osnaburgh Street, London, NW1 3ND, UK
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**2. Project title (not exceeding 10 words)**

The Waria Valley Community Conservation and Sustainable Livelihoods Programme
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**3. Project dates, duration and total Darwin Initiative Grant requested**

<b>Proposed start date:</b> May 2006		<b>Duration of project:</b> 3 years			<b>End date:</b> April 2009
<b>Darwin funding requested</b>	<b>Total</b>	<b>2006/07</b>	<b>2007/08</b>	<b>2008/09</b>	<b>2009/2010</b>
	£ 130 000	£ 46 000	£ 41 000	£ 43 000	£

**4. Define the purpose of the project in line with the logical framework**

Coral Cay Conservation (CCC) proposes to work in partnership with the people of the Waria Valley (Papua New Guinea) through their development arm organisation, the Morobe Bris Kanda (MBK), and collaborate with additional partners, to initiate the development of alternative sustainable livelihood options within the locally owned forest areas of the designated communities. This is coupled with enhanced environmental education and training programmes, contributing to the conservation and sustainable use of their forest resources. The aims of the proposed project include biodiversity assessments of the forest resources of the Waria Valley (including inventories of two traditionally important timber species: *Campnospermum brevipetiolata* and *Hernandia ovigera*); development of a GIS-based decision support system; implementation of community vegetation nurseries for restoration work; the initiation of alternative livelihood schemes (including small scale forestry and eco-tourism); coupled with environmental education, training and local capacity building programmes within the target communities. This aims to achieve local sustainable development based on benefits derived for local land owners from local forest biodiversity.

**5. Principals in project. Please provide a one page CV for each of these named individuals**

Details	Project Leader	Other UK personnel (working more than 50% of their time on project)	Main project partner or co-ordinator in host country
<b>Surname</b>	Raines	Turner	Yosi
<b>Forename (s)</b>	Peter	Craig	Cossey
<b>Post held</b>	Chairman and Founder	Director of Ecology	Scientific Officer
<b>Institution</b>	Coral Cay Conservation	Jaquelin Fisher Associates	Papua New Guinea Forest Research Institute
<b>Department</b>	Science	Ecology	Natural Forests

**6. Has your organisation received funding under the Darwin Initiative before? If so, give details**

Round 1: Initial surveys of habitats in the southern region of Turneffe Atoll, Belize. £186 500

Round 10: Regeneration rates of coral communities in Roatán, Honduras. £31 000

**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)**

**Activities (50 words)**

**Achievements (50 words)**

**8. Please list the UK (where there are partners in addition to the applicant organisation) and host country partners that will be involved in their project and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. What steps have been taken to ensure the benefits of the project will continue despite any staff changes in these organisations? Please provide written evidence of partnerships.**

**Jaquelin Fisher Associates (JFA)** – *Dr. Craig Turner (Director of Ecology)*. JFA are specialists in ecological surveys, environmental assessment and management and will oversee the biodiversity survey work and GIS development. Dr. Turner and Miss A Tamblyn (both of JFA) will lead this work and were both involved in the initial development of the project and pre-project visit to PNG in 2005.

**Morobe Bris Kanda (MBK)** – *Ewa O'soso (Program Manager)*. MBK is a local development partnership that represents the people of the Waria Valley. MBK will act as one of the main partners and has facilitated representation of key stakeholders from the Waria Valley, developing this project as a direct result of consultation with the people of Morobe area and their village counsellors, prior to approaching CCC.

**Village Development Trust (VDT)** – *Steven Yandima (Program Manager)*. VDT is an international development NGO based in Lae that often works in partnership with MBK. The VDT has assisted in developing the community based alternative livelihood schemes and future marketing and management of the forestry and eco-tourism components of the project.

**PNG Forest Research Institute (FRI)** – *Nalish Sam (Acting Director)*. FRI will be the second main partner for the project where Mr Cossey Yosi will act as in-country co-ordinator. FRI have been jointly involved in the resource assessment component of the project development. FRI have agreed to provide technical support (e.g. herbarium facilities) for the forestry/inventory components, and office space for project co-ordination.

**The Department of Environment and Conservation (DEC)** – *Dr. Wari Iamo (Dept Secretary)*. Based on preliminary proposals, DEC will provide permits and approvals for the project to operate and undertake specified work within PNG.

**PNG University of Technology, Dept of Forestry (UniTech)** – *Kulala Mulung (Acting Head)*. UniTech will provide additional technical support and students to attend field-training courses ensuring training and capacity building objectives are achieved.

CCC and JFA personnel have grown and strengthened the operational relationships with the proposed partners since 2004 and worked closely with MBK and FRI. CCC also have a depth of experience in managing progressive conservation programmes elsewhere despite personnel changes. Whilst key individuals have been identified within each partner organisation, multiple representatives of each group have been kept briefed and involved to ensure a knowledge buffer to mitigate against any staff changes.

**9. What other consultation or co-operation will take place or has taken place already with other stakeholders such as local communities? Please include details of any contact with the government not already provided.**

An in depth consultation has already taken place, with discussions beginning in 2004 with representatives of MBK and FRI. This proposal has evolved as a direct result of that consultation process and a pre-project development visit which was undertaken to PNG from August 23<sup>rd</sup>-September 1<sup>st</sup> 2005. During this trip (undertaken by Dr. Turner) meetings were held with local community leaders and representatives to ensure their needs were considered in the project. In PNG, 97% of the country's land is owned and managed under customary tenure and stewardship, by local clans and tribal groups, thus, communities have the final say in all resource management decisions. Consequently consultation with local leaders has been a key component to ensure support of local governance. Mr Ewa O'soso (MBK) and Mr Cossey Yosi (FRI) are also clan representatives of the project area, thus minimising risk of the project conflicting with local governance approaches. Meetings have also been held with regional government representatives, including Mr Sasa Zibe (former Environment Minister) who is the government representative for the Huon District.

## PROJECT DETAILS

**10. Is this a new initiative or a development of existing work (funded through any source)? Are you aware of any other individuals/organisations carrying out similar work, or of any completed or existing Darwin Initiative projects relevant to your work? If so, please give details explaining similarities and differences and showing how results of your work will be additional to any similar work and what attempts have/will be made to co-operate with and learn lessons from such work for mutual benefits.**

There are to date no such projects in PNG, however we are aware that projects involving certain similar elements of the proposed project have taken place in PNG (though not in the same geographic area) sponsored by the Darwin Initiative. These include: 'Developing local capacity for biodiversity surveys in Papua New Guinea' (R9-University of Sussex); 'Integrated River Basin Management (IRBM) in the Sepik River' (R12-WWF); 'Sustainable insect collecting and farming in Papua New Guinea' (R13-University of Cambridge); 'Training the next generation of Papua New Guinea conservation biologists' (R13-University of Sussex). Whilst there are some similarities between these and the proposed project, they do not have the same aims and objectives or proposed outputs and outcomes, since the current project is community forest conservation orientated. To ensure that benefits are maximised where similarities do exist between these projects, communications have already been established with Dr. Alan Stewart (University of Sussex) and Dr. Tim Bayliss-Smith (University of Cambridge), to ensure lessons can be learnt from previous work and avoid unnecessary repetition. CCC recognises there is some synergy between the proposed project and other initiatives operating in PNG (mainly by WWF, WCS, CI FAO etc) as well as elsewhere. A full analysis of these programmes is being undertaken to ensure a progressive and complimentary approach.

**11. How will the project assist the host country in its implementation of the Convention on Biological Diversity? Please make reference to the relevant article(s) of the CBD thematic programmes and/or cross-cutting themes (see Annex C for list and worked example) and rank the relevance of the project to these by indicating percentages. Is any liaison proposed with the CBD national focal point in the host country? Further information about the CBD can be found on the Darwin website or CBD website.**

The project will strengthen the capacity of managers, researchers, local stewards and other stakeholders in the Waria Valley to protect the forest ecosystem and its constituent species. The project will support the PNG Government in the implementation of the CBD through Articles: 7-Identification & monitoring (15%), 8-*In-situ* conservation (10%), 10-Sustainable use of components of biological diversity (10%), 12-Research and training (10%), 13-Education and awareness (10%), 17-Exchange of information (5%), 18-Technical and scientific cooperation (5%). It also addresses the following themes of the CBD: forest biodiversity (15%), public education and awareness (5%), sustainable use (7%) and biodiversity and tourism (8%). Liaison with the CBD national focal point of PNG will be initiated and maintained

**12. How does this project meet a clearly identifiable biodiversity need or priority defined by the host country? Please indicate how this work will fit in with National Biodiversity Strategies or Environmental Action Plans, if applicable.**

The PNG government recognises the importance of conserving and sustainably using forest biodiversity, and as such the World Bank is assisting the government to prepare the National Biodiversity Strategy and Action Plan (NBSAP) to meet commitments to the CBD as well as to ensure that the country's globally significant biodiversity is fully considered in any natural resource development. Prior to this, in 1991 the Government of PNG initiated the National Forest and Conservation Action Program, in conjunction with the World Bank and subsequently, the Forestry Act (1991; amended 1993) was enacted to facilitate establishment of a sustainable forest industry. Additionally, the Forestry and Conservation Project (FCP) has been developed and is designed to promote good governance, transparency and accountability in the forestry sector, and to generate better conditions for landholders. The project's primary objective is to help local people and government and non-governmental entities to manage and conserve PNG's extensive forest reserves. PNG's National Forest Authority has stressed the need to empower landowners to manage forests sustainably and make commercial logging less damaging and also encourage landowners to set aside biologically rich forest areas for conservation purposes. Recent reviews by FERN, and the *Papua New Guinea Country Study on Biological Diversity* (Sekhran & Miller eds, 1994) highlight the need for conservation and sustainable management of forests and respect for the rights of forest peoples within PNG. The *Papua New Guinea Conservation Needs Assessment Volume 1* (Alcorn 1993) and *Volume 2* (Beehler 1993) identified geographic areas of primary biodiversity importance and the *Catalogue of Biodiversity Data Holdings for Papua New*

*Guinea* (Hedemark & Peters 1997), systematically constructed a database regarding the biodiversity of PNG. Not only do these and other reports highlight the need for urgent forest conservation action they also stress that the customary land tenure system; whereby PNG's tribal clans control their land communally presents tremendous opportunities to develop culturally appropriate conservation models. This project will improve biodiversity knowledge of the Waria Valley, and provide management strategies and conservation approaches to be incorporated in the NBSAP.

**13. If relevant, please explain how the work will contribute to sustainable livelihoods in the host country.**

With over 85 per cent of the *Papua New Guinea* population live a largely subsistence lifestyle in rural areas, conservation and resource management efforts must clearly fit with the lives and ambitions of village people. The project will contribute to alternative livelihoods via two main mechanisms: (1) Eco forestry - community based forest management using portable sawmills – is an important example of this approach. This industry has developed through the efforts of a number of NGOs and has become a proven alternative to industrial scale logging for some communities. Combined with the forest resource assessment and vegetation nursery establishment this will provide an important alternative source of income. (2) Eco-tourism – the establishment of a small eco-tourism lodge within the Waria valley, will extend the network of similar lodges on the Huon Coast, already managed by VDT. The centre will engage both local stakeholders and other participants (students and tourists) on local, national and international scales. The guides and others employed in this work will gain income (from fees paid) to complement that obtained from their subsistence agricultural activities. Local staff will also be stewards for locally-driven conservation, ensuring the sustainability of the forest resource for both the inherent biodiversity and livelihood generation.

**14. What will be the impact of the work, and how will this be achieved? Please include details of how the results of the project will be disseminated and put into effect to achieve this impact.**

The work will deliver a conservation approach applicable to the local customary land tenure system, preserving an important forest ecosystem whilst permitting sustainable community forestry for local stakeholders. Enhancement of local environmental capacity will result in long-term sustainable resource use and effective conservation of the Waria Valley. Trained stakeholders will benefit from alternative livelihoods whilst conserving forest resources for local and regional benefit. The core results and strategy for dissemination, ensuring impact, are outlined below:

<b>Result</b>	<b>Impact &amp; Dissemination Strategy</b>
<i>Stakeholder Training</i>	Training of key community personnel in eco-tourism, eco-forestry and associated resource management issues will provide technical support and capacity for local stakeholders to protect their own environments, empowering the people of the Waria to determine their own futures.
<i>Trained Guides &amp; Eco-tourism</i>	Trained guides will facilitate the introduction of a responsible guiding and trekking programme which will allow local stakeholders of the Waria to better manage the environmental impacts of tourism, ensuring they are positive for the tourists, local communities and wildlife.
<i>Environmental Education Programme</i>	The active engagement of schools within the project area will further strengthen long-term local environmental capacity and further promote the project for continued local biodiversity conservation.
<i>Biodiversity Conservation &amp; Research Training</i>	The biodiversity databases (e.g. GIS), monitoring protocols and trained personnel put in place by the project will provide a foundation for future research and management of the Waria area. The development of local facilities will ensure a focal point for the implementation of an ecosystem-based approach to environmental management, closely coordinated FRI and UniTech.
<i>Sustainable Livelihood Generation</i>	The Eco-forestry and Eco-tourism will provide a sustainable alternative source of income for a number of Waria residents and their families, reducing the pressure placed on the species and habitats of Waria through other unsustainable livelihood development practices.
<i>Publications &amp; Presentations</i>	Project progress, findings and outputs will be publicised through radio, television and newspaper items in an active campaign to bring attention to the project and the Darwin Initiative. Papers will also be published.

Knowledge transfer and capacity building based on personal involvement of local people are at the heart of this project and hence 'dissemination' is an integral facet of what is planned. Additionally, outputs from this project will be used to promote this community conservation model to support the developing NBSAP.

**15. How will the work leave a lasting legacy in the host country or region?**

The project will increase local expertise and experience of biodiversity monitoring for long-term management of local forest areas, whilst achieving a local economic contribution through forestry and tourism initiatives, sustaining and developing local livelihoods. Thus, the conservation and sustainable use components will ensure continued benefit to local stakeholders, thus broadly achieving the stated aims of the CBD at a local level. The long-term commitment developed through the education, awareness and capacity building work will also ensure legacy and sustainability. It is also intended that the project will be used as a 'demonstration project' by MBK/VDT illustrating a community forestry model that would be applicable in other areas of PNG, thus achieving a wider legacy.

**16. Please give details of a clear exit strategy and state what steps have been taken to identify and address potential problems in achieving impact and legacy.**

To ensure that the proposed eco-tourism and eco-forestry initiatives continue to run effectively and sustainably, a locally-based Program Manager will be employed and trained, from amongst MBK local staff who have a long standing commitment to work in this area. To ensure continuity beyond the term of the first manager, a management plan and set of operational guidelines for the project initiatives, its staff and operations (e.g. guiding, research, and community education programmes) will be developed. Manuals will also be developed for all training programmes including that of the eco-tourism and eco-forestry initiatives. CCC are confident that given the long-term commitment of MBK, VDT and others to the Waria Valley that there will be adequate personnel available to run the project for the long-term. Trained individuals (e.g. MBK staff) will also be provided with all teaching materials so that they can train additional or replacement personnel ensuring that environmental capacity is maintained and spreads beyond the immediate phase.

Before leaving the area, CCC will ensure that the Program Manager has all the necessary equipment and materials for the smooth running of the project initiatives, associated training and education programmes, effective biodiversity monitoring, and tourism management. All staff will have received training in how to use these resources, including hardware such as computers, but also essential databases developed by CCC and partners, and all training manuals.

VDT and MBK have a depth of expertise in local eco-tourism and milling projects and thus can not only oversee management of these initiatives post-Darwin funding but can also implement well-structured and effective long-term marketing strategies.

The lasting legacy will be underwritten by actions from CCC's partners. The support of the following will continue: MBK, VDT, FRI, UniTech. The project is expected to be partially self-financing in the long-term and MBK will lead with post-project actions on the ground including funding bids to support additional work beyond the initial Darwin phase (as detailed in question 25). MBK have already committed some of their long-term budget (beyond 2009) to ensure this project and its activities continue. See additional letter of support.

**17. How will the project be advertised as a Darwin project and in what ways will the Darwin name and logo be used?**

In all the following the Darwin logo will appear: progress with the project will be reported on the CCC website which has an audience of 10 000 individuals per month; presentations at UK events open to the public (c.90 annually); CCC letterhead will feature Darwin as a funder; quarterly newsletter e-mailed to supporters (c.500) in the UK and abroad; bi-annual hard copy full colour newsletter sent to all supporters and handed out at events (c.5 000); conference posters; educational posters in English and other languages; in PNG partner websites and newsletters; posters; the educational centre itself will have a sign with the Darwin logo; guide materials and handouts to public participating in eco-tourism activities.

**18. Will the project include training and development? Please indicate who the trainees will be and criteria for selection and that the level and content of training will be. How many will be involved, and from which countries? How will you measure the effectiveness of the training and will those trained then be able to train others? Where appropriate give the length and dates (if known) of any training course. How will trainee outcomes be monitored after the end of the training?**

Training within the project will be undertaken in the following key areas:

- 1) Eco-tourism Centre Staff - The staff will be recruited (ideally from the local communities) based on relevant experience and knowledge of the Waria Valley. Training will be based on the approach currently used by CCC for project managers and field scientists who co-ordinate research and education projects for both local (national participants) and international eco-tourists. Completion of the 12-month training period will permit the staff to successfully manage the centre and co-ordinate the intended education and research programmes. Training will be delivered by CCC/VDT personnel.
- 2) Guides - The guide trainees will be primarily selected from the local community by the partner organisations under the following criteria: knowledge of biodiversity issues, knowledge of species and habitat characteristics within the Waria Valley and ability to learn techniques and teach those techniques to others. Training will take part in four phases, each of two weeks, and successful completion will ensure guides can lead groups to the same standard of UK Accredited Summer Mountain Leaders ASML). Training will be delivered by CCC/JFA personnel.
- 3) Research & Monitoring – Local stakeholders and scholarships students from Unitech will receive training in (i) Tropical forest ecology; (ii) Vegetation Inventory; (iii) Wildlife and survey techniques. The training programme will be built of collective expertise of CCC, JFA and FRI in ecological disciplines such as ecology, faunal and floral sampling and surveying techniques, geographical information systems, environmental decision-making, management planning, and environmental education. Training will be delivered by CCC/JFA/FRI personnel.
- 4) Environmental Education – Local teachers will be trained in effective environmental education techniques, building on the 20+ years of experience that CCC has in the field. Training will be delivered by CCC personnel.
- 5) Eco-forestry – Members of the community forestry cooperative will be trained in all aspects of eco-forestry using established protocols for the use of portable saw mills in rural areas. Training will be delivered by MBK/VDT personnel.

The effectiveness of the training will be evaluated through attendance records, questionnaires and practical tests completed by the trainees to assess the knowledge and techniques they have learnt. The quality of the field survey reports and management plan development will also be monitored to ensure that the trainees have assimilated and implemented successfully the techniques taught.

To ensure the sustainability of the training delivered, effective handover protocols and documentation will be developed with the trained centre staff, and two guides will be trained to train future guides. These activities will be overseen by the project staff.

**LOGICAL FRAMEWORK**

19. Please enter the details of your project onto the matrix using the note at Annex B of the Guidance Note. This should not have substantially changed from the Logical Framework submitted with your Stage 1 application. Please highlight any changes.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<b>Goal:</b> <b>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</b> <ul style="list-style-type: none"> <li>• the conservation of biological diversity,</li> <li>• the sustainable use of its components, and</li> <li>• the fair and equitable sharing of benefits arising out of the utilisation of genetic resources</li> </ul>			
<b>Purpose</b> Threatened forest resources of the Waria Valley are effectively conserved and sustainably used through enhancing the capacity of local researchers and stakeholders, whilst effecting alternative livelihoods for local land managers/owners.	New knowledge of local forest biodiversity. Biodiversity monitoring and community management system by Yr3. Evidence of regeneration by Yr 3. Self-sustaining forestry and eco-tourism enterprises by Yr 3.	Progress reporting by CCC/MBK/VDT.  Field survey reports and associated papers published.  Livelihood generation reports submitted with photographic record to Darwin.	Partner NGOs, community leaders and stakeholders continue to co-operate and remain committed to the project.  Experienced counterpart staff and trained stakeholders continue their participation for duration of the project.
<b>Outputs</b> Forest biodiversity resource assessment programme.  Community nursery and associated restoration programme implemented with associated community conservation agreements.  Small scale forestry and milling co-operative operational.  Education/Training programme completed.  Eco-tourism centre established (using local materials).  Local community conservation model disseminated.	GIS-mapped forest data for Waria Valley, with 10 local counterparts trained in Yr2 & Yr3.  Strategy development facilitated by village council representatives in consultation with MBK/VDT by Yr1, enacted & monitored by Yr2 & Yr3.  Co-operative mill with plan established Yr1. Operational Yr2 & Yr3.  10 students/yr trained (UniTech). Local schools adopt education programme.  Conversion of centre completed by Yr 2.  Bi-annual radio broadcasts, newspaper features & newsletters.	GIS output submitted to partners (FRI), technical reports/papers & management plan published. Conservation agreements endorsed and signed. Physical presence of nursery areas, with photo documentation of these and regenerated areas.  Co-op agreement signed. Financial & product reports. Photo documentation. One teacher/school trained. Education & training outputs published. Copies of certificates of students. Report on facilities and programmes at centre, with feedback from customers by Yr 3. Copies of media outputs sent to Darwin.	Trained counterparts remain committed to the project. Plans/reports are used locally.  Active and continued local participation by stakeholders.  Sustainable management principles adopted, and sufficient market for products. Trained teachers remain at schools, education materials still used. Students remain committed. Effective business plan & marketing of eco-tourism facilities to sustain custom and income. Media outputs reach and influence intended audience.

<b>Activities</b>	<b>Activity Milestones</b>	<b>Assumptions</b>
Stakeholder workshops	Yr1: Project planning workshops. Yr 1&2: Biodiversity training courses. Annual reviews (Yr 1-3)	Stakeholders remain committed.
Field Surveys	Yr 1: complete initial surveys and define monitoring protocol. Yr 2: continued surveys and GIS development. Yr 3: GIS completion and ongoing monitoring led by locally trained personnel.	Logistics, weather and stakeholder support permits surveys as planned.
Restoration	Agreed community restoration plan (Yr 1). Nurseries developed & regeneration started Yr 2, continued Yr3.	Stakeholder agreement.
Education/Training	Yr 1 & Yr 2: training programme for scholar students. Yrs 1-3: Education programmes implemented in schools and teachers trained by Yr 2.	Local teachers remain committed to programme and students are receptive
Forestry Initiative	Yr 1: small-scale forestry plan developed, agreed and implemented. Yr 2-3: Alternative incomes generated.	Stakeholder agreement, and marketing support from VDT & MBK.
Eco-tourism	Local construction of centre and staff training (Yr 1). Yr 2-3: start operating and income generation.	As above.
Media Outputs	Yrs 1-3: Bi-annual radio broadcasts, newsletters and newspaper out. NGO newsletters (various dates).	Target audience reached and influenced.

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

<b>Project implementation timetable</b>		
<b>Date</b>	<b>Financial year</b>	<b>Key milestones</b>
	Apr-Mar 2006/7 Apr-Mar 2007/8 Apr-Mar 2008/9	
<b>Year 1</b>		
May	May 2006	Stakeholder forum (development of management plans, operational guidelines, co-operative agreements).  Operational guidelines and management plan completed, including input from forum, local stakeholders, FRI, MBK, VDT, and Unitech.
June	June 2006	Stakeholder meeting and signing of agreement of management plans, operational guidelines and co-operative agreements.
July	July 2006	Planning of initial biodiversity survey phase. Selection of scholar students for training. Marketing Plan prepared with VDT for eco-tourism and eco-forestry operations.
August	August 2006	Planning stage for development of Eco-tourism centre advertised and marketing initiated for opening 2006.
September	September 2006	Begin biodiversity surveys and vegetation inventory work.
October	October 2006	Initiate schools education programme within Waria valley. Initiate training of education coordinators.
October	October 2006	Stakeholder forum. Review of initial 6 months.

November	November 2006	Begin construction of Eco-tourism centre. Selection of guides for training.
December	December 2006	Implement marketing plan for eco-initiatives
February	February 2007	Guides training continued. Initiate scholar training in biodiversity surveys and monitoring
March	March 2007	Initiate development of community vegetation nurseries.
<b>Year 2</b> April	April 2007	Stakeholder forum (on progress of site conversion and training progress to date).
May	May 2007	1 <sup>st</sup> year evaluation of education programme (Schools visits) and continuation. Implement marketing plan on a continued rolling basis.
June	June 2007	Second phase of schools programme and educational workshops on site.
July	July 2007	Guides training continued.
August	August 2007	Initiation of habitat mapping and GIS development.
September	September 2007	Planning and initiation of Eco-forestry operations.
October	October 2007	Completion of Eco-tourism Centre.
October	October 2007	Stakeholder forum. Review of completed conversion work and marketing actions (for schools, research students, eco-tourists and local visitors) biodiversity assessments and education programme. Guide training and eco-tourism sites.
November	November 2007	Implement marketing plan on a continued rolling basis for eco-tourism and eco-forestry (marketing of site on local, national and international scales).
January	January 2008	Collation of initial biodiversity and vegetation inventory data in order to revisit management plans and evaluate for future.
February	February 2008	On going management of vegetation nurseries. Continuation of eco-forestry operations. Scholar training
<b>Year 3</b> April	April 2008	Stakeholder forum on progress.
May	May 2008	Eco-tourism Centre opened. 2nd evaluation of schools education program
June	June 2008	Ongoing GIS and biodiversity survey work. 3rd phase of schools programme.
July	July 2008	Continued guide training.
August	August 2008	Review of restoration work.
October	October 2008	Stakeholder forum on progress.

January	January 2009	Finalise research and GIS outputs.
February	February 2009	Final scholar training phase.
March	March 2009	Finalise write-ups and project handover.

**21. Set out the project's measurable outputs using the separate list of output measures.**

<b>PROJECT OUTPUTS</b>		
<b>Year/Month</b>	<b>Standard output number (see standard output list)</b>	<b>Description (include numbers of people involved, publications produced, days/weeks etc.)</b>
YEAR 1		
April 2006	17A	Develop project partners email forum, discussion group.
April 2006	8	Recruitment of international field staff to be based in PNG for project duration.
April 2006	15A 15B 15C	Press release within PNG Local press release, Huon District National press release, UK.
May-June 2006	7	Development of training and survey manuals.
May 2006	14A	Stakeholder forum for discussion on management plans and operational guidelines.
May 2006	8	JFA/CCC staff in country for project start and stakeholder forum (2 wks).
July 2006	9	Marketing Plan and survey plans prepared
July 2006	5	Scholars selected for training course training course.
July 2006	8	One UK staff in country for guides training (4 wks)
August 2006	15B	Local press release of Darwin project initiation.
August 2006	19C	Local radio work (Lae).
September 2006	7	Education manuals completed for local schools.
October 2006	6A	Schools workshops and education days initiated in Waria Valley.
October 2006	8	One UK staff in country for guides training and stakeholder forum (6 wks)
October 2006	14A	Stakeholder forum, 6-month evaluation.
November 2006	5	Guides training.
November 2006	16A 16B 16C	Newsletters documenting progress after 6 months. UK circulation 'Reef & Leaf' 5,000 PNG circulation 'Reef & Leaf' 500 UK circulation of e-news 'RARE' 200 PNG circulation of e-news 'RARE' 200.

December 2006	21	Actions from Marketing Plan (to include international marketing of resource to eco-tourists).
February 2007	8	One UK staff in country for guides training (4 wks)
February 2007	5	Guides and scholars training (biodiversity and monitoring).
March 2007	21	Nursery establishment
<b>YEAR 2</b>		
April 2007	14A	Stakeholder forum for 6-month review.
April 2007	23	In kind contribution of £42,000.
May 2007	16A 16B 16C	Actions from Marketing Plan (to include international marketing of resource to eco-tourists). PNG circulation of 'Reef & Leaf' 500, UK circulation 'Reef & Leaf' 5,000. PNG circulation of e-news 'RARE' 200 UK circulation of e-news 'RARE' 200.
June - onwards 2007	6A	Schools on site programme continued.
July 2007	8	One UK staff in country for guides training (4 wks)
August – onwards 2007	5	Biodiversity monitoring continued.
October 2007	21	Ecotourism centre completed.
October 2007	14A	Stakeholder forum, 6-months review.
October 2007	8	1 UK staff in country for forum & marketing (3wks)
October 2007	15A 15B 15C	Actions from Marketing Plan including National Press release PNG. Local press release. International press release from UK.
October 2007	19C	Local radio (Lae) review of project and marketing plan.
November 2007	16A 16B 16C	PNG circulation of 'Reef & Leaf' 500. UK circulation of 'Reef & Leaf', 5,000. PNG circulation of e-news 'RARE' 200. UK circulation of e-news 'RARE' 200. Newsletters updating project progress and achievements to date.
January 2008	11	Research reports
February 2008	14A	Stakeholder workshop evaluation of project to date.
March 2008	23	In kind contribution of £42,000.
<b>YEAR 3</b>		
April 2008	5	Biodiversity and GIS work continued
May 2008	21	Eco-tourism centre receiving tourists

July 2008	8	Continued guide training
October 2008	14A	Forum to review progress of eco-initiatives
Dec 2008	12A/13?	Complete research and compile final reports/papers
February 2009	8	Two UK staff (ccc/jfa) for workshop and to initiate post-Darwin handover & and complete scholar training
March 2009	23	In kind contribution of £42,000.
March 2009	15A 15B 15C	Press releases in UK, PNG and local (Lae) press documenting completion and plans for the Waria Valley.
March 2009	20	Handover of capital items (e.g. survey kit, PCs).
March 2009	21	Handover of eco-tourism centre.

#### PROJECT BASED MONITORING AND EVALUATION

**22. 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.**

**Management practice guidelines established for sustainable habitat.:** *Forest management guidelines written:* the Project Leader (PL) will monitor progress, review drafts and sign-off the final copy with a co-signature from the Project Partner Co-ordinator (PP).

**Local counterparts involvement in the project's aims:** *Local stakeholders sign a memorandum of receipt of sustainable management practice guidelines with a commitment to implement:* PL to develop the Memorandum with the PP, agree drafts, ensure all stakeholders on-board and then sign-off.

**Ecotourism centre completed by Yr 2:** *Photographic record delivered to Darwin showing changes:* CCC staff on-site to keep a date-validated photographic record and submit with explanatory text via PL to Darwin.

**Vegetation restoration nurseries established by Yr 2.** *Photographic record delivered to Darwin showing changes:* CCC staff on-site to keep a date-validated photographic record and submit with explanatory text via PL to Darwin.

**Training/Education programmes delivered:** *Photocopies of course examination certificates with names of those successful at the end of the training programme:* CCC staff on-site to maintain records (Centre staff & Guides) with co-signatures on certificates from PP. Submit to PL.

**Development of Eco-forestry initiative by Yr2:** *Report on the facilities and programmes available at the ecotourism centre with written feedback from the first customers ('happiness sheets').* CCC staff on-site to maintain feedback records with co-signatures on certificates from local partner's representative. Report on facilities and programmes to be co-authored by PL and PP.

**Species abundance and distribution:** *Survey report at end of Yr1,2 & 3:* Reports validated and edited by CCC's Principal Scientist and submitted to PP and then PL for sign-off.