



2/356



Submit by 21 January 2005

**DARWIN INITIATIVE APPLICATION FOR GRANT ROUND 13 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> School of Biological Sciences, University of Aberdeen	<b>Address:</b> Hilton Place, Block M, Aberdeen AB24 4FA UK
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**2. Project title (not exceeding 10 words)**

Biodiversity Monitoring in Forest Ecosystems in Bale Mountains Park, Ethiopia (REF 356)
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**3. Project dates, duration and total Darwin Initiative Grant requested**

<b>Proposed start date:</b> 1 September 2005	<b>Duration of project:</b> 3 years				
<b>Darwin funding requested</b>	<b>Total</b>	<b>2005/06</b>	<b>2006/07</b>	<b>2007/08</b>	<b>2008/09</b>
	£ 155,730	£ 51,286	£ 41,615	£ 44,415	£18,414

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

The purpose of the project is to conduct research and to strengthen the capacity of researchers, government agents, and local people to conserve native forest species of plants and animals in the Harrena Forest in Bale Mountains Park.
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**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>	Pinard		Garedew
<b>Forename (s)</b>	Michelle Amy		Fikadu
<b>Post held</b>	Lecturer, Tropical Forestry		Warden
<b>Institution</b>	U Aberdeen		Bale Mountains Park
<b>Department</b>	School of Biological Sciences		P O Box 107, Dinsho, Bale, Ethiopia
<b>Telephone</b>			
<b>Fax</b>			
<b>Email</b>			

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

The conservation and management of Malagasy Microchiroptera and their habitats (Prof Paul Racey; 10/024); The role of fruit bats in maintaining biodiversity in Madagascar (Prof Paul Racey; 162/07/027); The biodiversity of rheophytes and river water chemistry in Ghana (Dr Mike Swaine)

**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

Excellence in Teaching and Research

Activities

Teaching and Research

Achievements

Teaching: Rated Excellent in Teaching Quality Assessment reviews

Research: Grade 5 (International Excellence) in Research Assessment Exercise in Zoology and Plant and Soil Science

**8. Please list the overseas 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.**

Bale Mountains Park (BMP). The park staff are responsible for the implementation of park management activities, although in practice they have few resources to direct to the task. Mr Fikadu Garede, the Warden, will serve as the main project partner (letter #1 attached). He will participate in the planning and implementation of the monitoring programme and mobilise his staff (4 biologists and about 30 park rangers) to participate in the training programmes and to implement the field work associated with monitoring. He will facilitate access to the research facilities in the park for project staff, including accommodation near the Headquarters and in the Harrena forest. He will also serve as a liaison to the District Office at the southern end of the park to facilitate the implementation of the community-based programmes. Mr. Garede discussed the project in detail with Mamo and Pinard, assisted in identifying training needs and potential trainees, and confirmed that the work proposed is complementary to on-going and planned activities. He is the intended recipient of the MSc training element in the proposal and will assign a deputy to cover his duties related to the project while he is away in year 3. There has been low turnover of staff (both at the professional and ranger levels) in BMP in recent times and the numbers are robust enough to allow the project to continue even if there are staff changes.

Rural Land and Natural Resources Administration Sector, Oromia Regional Agriculture Department (ORAD). This is the government institution with overall responsibility for management of the park, the Bale Mountains Park staff fall within this administrative unit. It will be consulted at all stages of the project and invited to participate in all project planning activities in order to ensure that the project is consistent with park policy. At the district level, there are technical staff working on natural resource conservation issues outside of park areas, and the project will invite at least one staff member from each of the four districts bordering the park to participate in the technical training activities. Mr Biffa Badada (Director) has been briefed on the project and has agreed to support the project (letter #2 attached). Dr Fikru Deksis, the Team Leader for Wildlife and Forestry has also been briefed.

Wondo Genet College of Forestry, Debub University (WGCF). Mr. Mamo is a Lecturer in Wildlife Biology and will contribute expertise in the training related to monitoring mammals and maintaining the database (letter #3 attached). Mr. Mamo helped to identify the need for the project with the PI and colleagues at Ethiopian Wildlife Conservation Organisation and BMP. Together with the PI he discussed the project proposal with potential collaborating institutions and estimated costs. Dr Menassie Gashaw is a Visiting Lecturer in Wildlife Management at WGCF. Dr Gashaw conducted his doctoral research in the park on fire ecology and has conducted wildlife surveys for EWCO in BMP. He will contribute expertise for the training programme and will assist in the development of the monitoring programme and database. He will also liaise with local ecologists, botanists,

ornithologists and zoologists to facilitate exchange and collaboration with project staff. He will assist in the implementation of the community-based programme. He discussed the project in detail with Pinard and Mamo in Jan 2005 and has agreed to support the support (letter #4 attached). Dr Zebene Asfaw, the Research Coordination Officer at WGCF has been involved in discussions about the project, particularly the community component and has expressed an interest in developing further collaboration, particularly research opportunities for the MSc students at WGCF on the project (letter #5 attached).

Bureau of Agriculture (BOA). Mr Tadesse Birhanu, Environmental Protection Team Leader, has provided input during project development and he has agreed to serve as an advisor to the project, particularly in the community development programme. He has experience with agriculture and forestry extension services provided by the Bureau, as well as project and research experience with community-based forestry. He will facilitate inter-regional communication and collaboration in community-based programme.

**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.**

Institute for Biodiversity Conservation and Research (IBCR), Ethiopia. This federal institute is responsible for the implementation of Biodiversity work Ethiopia. Their principal project has been the development of a gene bank for agricultural plants but they also play a key role in integrating biodiversity research in the country. They are currently involved in a GEF Project aimed at bringing together the stakeholders of BMP to document on-going activities, to identify gaps in conservation efforts and to develop an integrated strategy for promoting the conservation of the flora and fauna in the park. The main research activities that have been initiated under the GEF project is related to medicinal plants, their cultivation and conservation. We have discussed the project with Dr Kassahun Embaye (Deputy Manager) and Dr Girma Balcha (General Manager). We will invite IBCR staff to participate in project workshops to facilitate interagency information exchange. When possible and appropriate, they will provide technical expertise to project staff, particularly in relation to research project planning activities to ensure that where appropriate, the project contributes material to the gene bank project.

Ethiopian Wildlife Conservation Organisation (EWCO). This organisation provides technical support to regional governments and NGOs involved in wildlife conservation in the country. They will be invited to participate in project planning, training and research activities. We have discussed the project with Mr Tadesse Hailue (Manager) and he has agreed to serve as an advisor to the project.

Ethiopian Wolf Project, an NGO working towards the conservation of the Ethiopian Wolf. Dr Zelalem Tefera has discussed the project with Mr Mamo and Dr Gashaw. We will coordinate with this group to ensure that the research and monitoring activities are complementary to their work.

World Wide Fund for Nature (WWF). Mr Fetene Hailu, Deputy Coordinator in Addis briefed us on WWF's community-based activities in BMP with the six villages (peasant associations) in the southern end of Bale and has verbally agreed to serve as an advisor to this project.

Birdlife International, Dr Marc Languy, Albertine Rift Ecoregion Coordinator, WWF-EARPO, Nairobi, Kenya, has been contacted and has agreed to provide advice and contacts with regional and local ornithological expertise.

Research and teaching staff at Addis Ababa University (AAU) will be invited to participate in the training activities. Their involvement will be facilitated by Dr M Gashaw.

## 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.**

This project is a new initiative. We are aware of no other Darwin projects in the region, and no similar efforts to develop monitoring programmes in the Harrena forest. However, there are other relevant projects that have recently ended or are underway. There is a current project in BMP supported by Frankfurt Zoological Society that is developing a monitoring protocol for zebras and mountain nyala in the park; this project has no training components. A WWF project to provide a socio-economic survey of the communities living in and near the southern boundary of the park finished in Dec 2004. The project included a small component that supported organic coffee production, the main output was to build a storage facility for the beans. There is a new community-based forestry and wildlife project near the Headquarters in Dinsho, this is mainly focused on medicinal plant cultivation. GTZ sponsored an integrated forest management project in Dodola (about 40 km from the park headquarters and outside the park) that supported the development of guide cooperatives to support ecotourism and a participatory forest management component that developed agreements between user groups from the communities and the government over management of about 2000 ha of forest. The regional government is currently trying to expand the area of forest managed under participatory agreements. The Forest Research Center with Dr M Gashaw has established two permanent plots in the forest to study the impacts of the fire in 2000 on the forest. Through collaboration with Dr Gashaw the data and lessons learned will be made available to the project.

**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.**

BMP and ORAD are charged with the protection of the park's biodiversity. By strengthening the capacity of the BMP (and ORAD staff working in the surrounding districts) to protect the region's flora and fauna, the project shall support the Government's implementation of Articles 6 (5% integration), 7 (40% monitoring), 12 (15% research), 13 (20% public awareness), 14 (15% impact assessment) and 17 (5% information exchange) of the Convention of Biological Diversity.

The Institute for Biodiversity Conservation and Research (IBCR), the federal institution with responsibility for integrating conservation research and activities in the country, will be invited to participate in project planning and dissemination workshops. The IBCR is currently working with our main project partner and his institution (F Garedew, BMP) on a medicinal plants project supported by GEF money, thus information exchange will be facilitated through this on-going collaboration.

**12. How does the work 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.**

Bale Mountains Park is one of Africa's most important centres of biodiversity and endemism with

its expanse of afro-montane habitat and broad altitudinal range. Together with the Mena-Angetu National Forest Priority Area (MANFPA) to the south of the park, the area supports more than half of the country's endemic bird and mammal species, and the country's largest expanse of mid-upland forest, a biome that is a national priority for conservation. Of the varied ecosystems present within the 2200 km<sup>2</sup> park, the Harrena forest is one of the most threatened, due to the recent influx of settlers (estimated at 5000 new settlers displaced by drought-related resource degradation in the eastern part of the country), a shift away from the indigenous Oromo land management system to crop production and livestock husbandry as the main economic activity of residents and forest clearance and degradation associated with grazing, fire and coffee production. Currently there is an estimated 66,000 people living in the park (F Garede pers. Comm.; MoA 2003), basically falling into two groups, long-term residents whose families have lived in the region for generations and more recent settlers that have moved into the region in the past decade. Policies governing park management are contradictory in regards to residents within the park boundaries, with some documents stating that people living within the park should be relocated, and others recognizing the rights of long-term residents to live within the park. The draft document of the new management plan (in preparation) includes a recommendation that support is needed to help long-term residents develop livelihood strategies that are compatible with the conservation objectives in the park. This project will contribute to park priorities for community development by implementing a community awareness programme for recent settlers in the park and by assessing the compatibility of a variety of indigenous livelihood strategies practiced by long-term residents in the park with conservation objectives.

Natural resource conservation and management, and in particular, park management has been devolved from the national to the regional governments in Ethiopia. BMP falls within Oromia Region. A recent project to strengthen institutional capacity to manage BMP generated a set of priority actions and considerations to support sustainable resource management and use in the park (MoA 2003). This project is directed at two of these priorities, the first priority being to strengthen and facilitate monitoring and research in the park and the second being to increase awareness, by the local people about the importance of protected areas and the impacts of their activities, and by the park staff about modern approaches to protected areas management.

Ministry of Agriculture. 2003. Report on Bale Mountains National Park and Mena-Angetu National Forest Priority Area, DGIS-WWF Ethiopia Project (ET0026,03). Sociology and Anthropology. Prepared by B & M Consultants, Addis Ababa, Ethiopia.

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

By protecting the forest ecosystems in BMP, the project will contribute to watershed protection which is vital to livelihood security for many Ethiopians. The headwaters for 40 rivers originate in the Bale Massif and a hydro-electric dam on the Wabe Shebelle river provides a substantial proportion of the national electricity supply.

By providing training and experience for the park staff, their job satisfaction will be improved and they will be more likely to remain in post. This will bring benefits to the park in terms of increased protection and continuity in management, which in turn, will increase the security of income from tourism. By providing park staff with training in modern approaches to park management (i.e., participatory management), people-park conflicts will be more readily managed contributing positively to the long-term protection of the park.

Income from tourism (hiring horses and serving as guides) is important for the livelihoods of many people living in and near the park. By improving the level of protection in the park, this income from tourism will be protected.

By increasing community awareness of the importance of protected areas and the impacts of grazing, fire and forest clearance on ecosystem function, the project will facilitate communication

and understanding between park managers and residents. Further by generating new knowledge about the indigenous livelihood strategies practiced by long-term residents in the park, the project will provide a foundation for the development of agricultural and forestry extension support to promote livelihood activities that are compatible with ecosystem conservation.

**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 Harrena forest zone in the park will have a functional monitoring programme that is providing the park staff with information about the health and status of the forest. The project will provide the Park with a monitoring protocol, a database and staff trained in the implementation of the monitoring protocols and database management. By providing training to senior staff in research methods and research proposal writing, they will have the skills necessary to develop research and to capture funding. By strengthening the links between conservation workers with academic institutions in the country, future research will be facilitated.

A second impact of the work will be that people living in the forest in the park, particularly the more recent settlers who lack experience with indigenous land use management systems, will have a greater awareness of the role of protected areas, and how forest ecosystems change in response to grazing, fire and clearance. This will be achieved through the provision of teaching materials (i.e., posters, class activities, exercise sheets) to schools and community groups within BMP and MANFPA, along with tuition for the teachers on how the materials can be used.

Thirdly, the regional government and NGOs working to support rural development and sustainable livelihoods of people living in and near the park will have new information about the compatibility of various forms of indigenous land management with conservation. This will be achieved through a participatory research directed by project staff and disseminated through collaboration and documentation.

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

The training of park managers, biologists, rangers and conservation officers working in other natural resource areas in the region will ensure that the knowledge base and experiences gained in monitoring, research methods and park management are disseminated. Outputs will be disseminated through publication of reports and papers, through ORAD, IBCR and EWCO.

The strengthened links between agencies within the region (e.g., BMP and ORAD Rural Lands and Natural Resources Administration), and between the conservation agents and academic institutions will facilitate the extension of research within the park and programmes for community development.

The training of teachers and the provision of education materials will ensure that efforts in environmental education maintained.

**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.**

After the 3 y project a monitoring programme for the Harrena forest will be in place and functional (more or less independent of external staff during the third year). The park staff, particularly the Warden and biologists will ensure that the monitoring is continued and that staff pass on their knowledge by training others.

A potential constraint to continuation of the monitoring in the park is lack of financial support to cover field costs involved. To address this issue, the project is providing 10-12 graduates with skills in research design and proposal writing, and is strengthening the collaboration between the park staff and academic institutions in the country to facilitate the continuation of an active research programme in the park.

By the end of yr 2, the education materials developed for the community awareness programme will have been tested, disseminated, and at least 10 teachers experienced in their use. By involving the teachers in their development, the likelihood of the material being relevant and useful over time is increased.

By the end of yr 3, the participatory research on indigenous land management practices will be completed; by involving staff from the conservation and agricultural and forestry extension groups within the four districts at the southern end of the park, the experience with active research and information on the livelihood strategies will be disseminated.

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

The project will be profiled on posters placed in the offices of the institutions involved in the project (ORAD, WGCF, BMP, WWF, EWCO, IBCR) and in the Park Headquarters and the Park Office in Dinsho. The logo will appear on the project vehicle and on all educational materials associated with the project, including posters, booklets, and presentations.

**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?**

The emphasis of the work on the monitoring programme is training and development. Although there is a cadre of biologists with BSc training working for the government in parks and other natural resource areas, they lack skills in field ecology, data management and experimental design. A training programme to support field sampling for mammals, birds, and plants and database management will be aimed at the conservation staff (including biologists, ecologists, foresters, rangers, approximately 30) working in BMP and in the Natural Resource Conservation Offices (approximately 16) of the four districts that are adjacent to the park. An additional training programme will be provided to about 10 BSc holders to focus on research design and proposal writing, to provide them with the skill needed to generate small research proposals that can be put forward for national funding competitions.

In addition, one of the park biologists will be sponsored to attend a MSc Programme in Conservation Biology in the UK. This graduate level training will strengthen his capacity to support the research activities of his staff and to develop the monitoring programme over time. The park warden and his staff will monitor the training outcomes for the rangers, and the ORAD will monitor training outcomes for the professional staff and for conservation officers working in the districts.

The project also includes a training programme for teachers working in local schools to implement curricular materials on environmental education, particularly on protected areas. The training will target about 12 teachers from the districts at the southern end of the park with the intention that these teachers will then be able to teach others to adapt and use the materials.

Also, the project includes a training course on modern approaches to protected areas

management. This course will target about 20 scouts and rangers from the region, who typically have had some technical training but no formal exposure to participatory approaches to resource management.

The schedule for the training events will be developed in consultation with collaborators and participating institutions.

## 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
<p><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></p> <ul style="list-style-type: none"> <li>• <b>the conservation of biological diversity,</b></li> <li>• <b>the sustainable use of its components, and</b></li> <li>• <b>the fair and equitable sharing of benefits arising out of the utilisation of genetic resources</b></li> </ul>			
<p>Purpose            The purpose of the project is to conduct research and to strengthen the capacity of researchers, park managers and other government agents, and local people to protect native forest species of plants and animals in BMP.</p>	<p>Biodiversity monitoring programme for Harrena forest in place and functioning by yr 3.</p> <p>New knowledge on biodiversity in Harrena forest ecosystem in BMP, particularly vascular plants and vertebrates and landscape structure and composition.</p> <p>Awareness of communities on the role of protected areas strengthened and the awareness of park staff on participatory approaches to resource management strengthened.</p> <p>New knowledge on the compatibility of various indigenous land management strategies with conservation</p>	<p>Field survey reports and publications by partner organisations.</p>	<p>Government policies and programmes remain supportive of conservation work in BMP; Oromia Agriculture and Rural Land Development Bureau, BMP, Wondo Genet College of Forestry remain viable and committed.</p> <p><i>Changes have been made here to:</i></p> <ol style="list-style-type: none"> <li>1) <i>reflect changes in institutional responsibilities for the park that have resulted from the recent decentralization policy that transferred park management from the federal to the regional government;</i></li> <li>2) <i>the community component has changed from developing a participatory monitoring programme for wild coffee to one supporting increased awareness of protected area management and research on indigenous land management practices of the long-term settlers; this change was requested by ORAD; park policy in regards to settlers within the park currently supports relocation outside the park for all recent (post 1991) settlers, precluding community development work devoted to sustainable use of park resources by these residents;</i></li> <li>3) <i>the training programme for park staff has been expanded to include a unit on modern</i></li> </ol>



	objectives.		<i>approaches to park management, in response to the host country's priorities.</i>
Outputs Monitoring programme for Harrena forest ecosystem in BMP established and functioning through three partner institutions	Minimum of 20 staff from partner institutions trained by year 3 in sampling protocols, data analysis, and database maintenance.  Sampling protocols elaborated and tested by year 2.	Field reports  Database with biodiversity data (vascular plants and vertebrates) with associated manual.  Participant attendance records.	Trained staff remain in institutions and in positions where they can use the skills provided and train others in the skills.
Report on the Status of the Harrena Forest in BMP published and distributed	Report peer-reviewed and publication date established, distribution arrangements in place. 300 copies produced and distributed by y 3.	Published reviews and feedback on report.  2 copies sent to Darwin Initiative	
Community awareness programme established and functioning through three partner institutions	Participatory appraisal conducted and results discussed.  Curriculum materials developed and tested by y 2.  At least 10 teachers trained in the use of education materials.  At least 15 scouts and rangers trained in the fundamentals of participatory resource management.	Local meeting reports.  Published materials.  Participant attendance records.	Users and relevant stakeholders are willing and able to participate in the process to develop agreements and protocols.
Report on the Compatibility of Indigenous Land Use Management Strategies with Conservation	Report peer-reviewed and publication date established, distribution arrangements in place. 300 copies produced and distributed by y 3.	Published reviews and feedback on report.  2 copies sent to Darwin Initiative	
Lessons learned and best practices	1 Booklet on monitoring forest		Materials reach and positively influence intended

disseminated	<p>ecosystems produced</p> <p>1 Booklet on the livelihood strategies and their compatibility with forest conservation</p> <p>2 posters produced</p> <p>2 papers submitted for publication in scientific journals</p>		stakeholders.
Activities	Activity Milestones (Summary of Project Implementation Timetable)		
Workshops / Training Events	<p>Yr 1: Project planning workshop with project team to agree workplan, define training programme;</p> <p>Yr 1: Field-based training (1) mammals; (2) birds; (3) plants followed by data management training;</p> <p>Yr 2: Training workshop on (1) experimental design and research proposal writing, and (2) modern approaches to protected area management;</p> <p>Yr 2: Training workshop for educators on the protected areas;</p> <p>Yr 3: Final workshop, for dissemination and work on publications</p>		
Research	<p>Yr 1: Collate historical data on forest cover in the park, including satellite data from the national Woody Biomass Project, conduct spatial and landscape analyses on forest cover and forest cover change.</p> <p>Yr 1: Develop and implement protocols for sampling vascular plants, birds, mammals, ecosystem and landscape structure and function; develop database structure.</p> <p>Yr 1: Conduct PRA in at least two settlement areas within the park to determine needs and priorities for community awareness programme.</p> <p>Yr 2: Complete baseline data collection, process material, digitise data and conduct preliminary analyses on vertebrate and plant diversity.</p> <p>Yr 3: Conduct field research on the impacts indigenous land management activities on forest ecosystem processes.</p> <p>Yr 3: Complete analysis of baseline data and revise monitoring plan and database as needed</p>		

Reports and publication development	<p>Yr 1: Develop educational materials for communities about protected areas and impacts of grazing, fire and forest clearance. 2 Posters produced.</p> <p>Yr 2: Report on spatial analysis of forest cover and landscape diversity.</p> <p>Yr 2: Interim report on monitoring plan for the Harrena forest.</p> <p>Yr 2: Booklet on monitoring forest ecosystems.</p> <p>Yr 3: Final report presenting summary of findings from baseline sampling.</p> <p>Yr 3: Manual describing sampling protocols, database and guidelines for use and development.</p> <p>Yr 3: Booklet on livelihood strategies and their compatibility with forest conservation objectives.</p> <p>Yr 3: Papers submitted to scientific journals for peer-review.</p>
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**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 2005/6 Apr-Mar 2006/7 Apr-Mar 2007/8	
September 2005	5/6	Appoint Project Staff (MSc level)
October 2005	5/6	Project Planning Workshop in Goba
March 2006	5/6	PRA Conducted and Community-Awareness Programme Structured
June 2006	6/7	Field-Based Training Completed
August 2006	6/7	Field Protocols Defined, Implemented
June 2007	7/8	Research Methods and Park Management Training Completed; Teacher Training Completed
August 2007	7/8	Research on Forest Cover and Landscape Biodiversity Completed
September 2007	7/8	Darwin Trainee to U Kent, DICE MSc course
August 2008	7/8	Final Workshop

**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>

07 SEP-08 AUG	2	One Ethiopian graduate to year long MSc course in Conservation and Tourism at U Kent, DICE.
06 MAY-SEP 07 MAY-SEP	4A	4 University of Aberdeen undergraduates, partnered with 4 Ethiopian undergraduates for a biological expedition, funded separately by UA and a variety of UK charities.
06 MAY-SEP 07 MAY-SEP	4B	15 weeks in each of two years
05 NOV-06 JUNE	6A/6B	20 conservation staff (biologists, ecologists, rangers, scouts) participate in three field training sessions, each approximately one week in duration, one focused on mammals, one birds, one plants. In four blocks of one week sessions
05 DEC-06 MAR	6A/6B	3-day training course on modern, participatory approaches to park management for 20-30 scouts and rangers
05 DEC -06 MAR	6A/6B	4-day training course on research methods and proposal writing for 10 graduate staff
07 JAN -07 JUNE	6A/6B	One day training session for 10-15 teachers in the use of education materials developed by project for increasing awareness of the role of protected areas and human impacts on forest ecosystems.
05, 06, 07	7	Information booklets on monitoring forest ecosystems, and on land management practices and their implications for conservation. Two posters on the role of protected areas. A manual on monitoring forest ecosystems, with protocols defined for vascular plants and vertebrates and guidance on database development, maintenance and analysis.
05/06/07/08	8	14 weeks in each of year one and two, 6 weeks in year three split across three UA Academic Staff
08 AUG	11B	2 papers to be submitted
08 AUG	12A	A database for vertebrates and vascular plants in the Harrena forest of BMP
08 AUG	14A	Final dissemination workshop
05/06/07/08	15A/15B/15C	One of each in each calendar year
05/06/07/08	19A	One in each calendar year
08 AUG	20	Second hand Toyota 4 wheel drive truck, value £8,000

08 AUG	22	2 Laptop computers £400 Database software, GIS software, data analysis software £800 Reference collection £200
05 SEP – 08 AUG	23	Number of plots and transects for monitoring to be determined during project  Approx £42,000 in time donated by Principals and others

#### **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.**

The project leader will maintain regular contact (by fax or email) with the main project partner in BMP and collaborators at WGCF and will receive monthly reports from the project staff. The reports will include progress in achieving indicators and outputs. Dr Gashaw and Mr Fikadu will assist in monitoring project progress, providing local supervision to project staff.

The project leader will visit the site and collaborating institutions annually and will co-lead the project planning workshop. Dr Burslem and Dr Lambin will work with project staff and participate in training programme as required. Key project staff (Pinard, Fikadu, Gashaw/Mamo, Debsu, Birhanu) will meet or hold phone conferences bi-annually to monitor and evaluate the project. All training sessions will be evaluated, as will materials produced during the project by key project staff and peer-reviewed as appropriate.