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

Name: CEH	**Address: CEH Lancaster, Library Avenue, Bailrigg LA1 4AP**

2. Project title (not exceeding 10 words)

Developing integrated assessment of biodiversity in secondary forest in Belize

3. Project dates, duration and total Darwin Initiative Grant requested

Proposed start date: 01/05/05					**Duration of project: 3 years**	
Darwin funding requested	**Total**	**2005/6**	**2006/7**	**2007/8**	**2008/9**	
	(£) 168 291	**(£) 62 500**	**(£) 50 000**	**(£) 53 137**	**(£) 2 654**	

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

- To determine the biodiversity value of secondary forest tracts within and surrounding three protected areas, that are regenerating from past natural and anthropogenic impacts
- To create databases of habitats, plant and animal species within the three protected areas by collation of existing data and additional data collection
- To develop a basic GIS of habitat types, species and landuse within and surrounding the three areas to use as a tool for biodiversity assessment
- To compare forest regeneration in naturally regenerated forests (e.g. post-hurricane) with that from anthropogenic landuse specifically post-agricultural
- To relate past landuse and surrounding landuse to biodiversity and attempt to identify indicator species that could be used to demonstrate conservation status

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

Details	**Project Leader**	**Other UK personnel** *(not more than 50%time, but involved)*	**Main project partner or co-ordinator in host country**
Surname	**Maskell**	**Firbank**	**Walker**
Forename (s)	**Lindsay**	**Les**	**Paul**
Post held	**Higher scientific officer**	**Head of Landuse systems group**	**Director**
Institution	**CEH**	**CEH**	**Wildtracks**
Department	**Ecosystem assessment and forecasting**	**Ecosystem assessment and forecasting**	**Biodiversity Assessment and Conservation Planning**
Telephone			
Fax			
Email			

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

Yes CEH has been involved with many projects, working in Nepal, Serengeti, Uganda, Cameroon, Tanzania and Sierra Leone. Projects covered different aspects of biodiversity conservation from Computers in Terrestrial Ecology, Sango Bay, Uganda to habitat audit and change detection in Sierra Leone.
However, my section based at CEH Lancaster called 'Ecosystem Assessment and Forecasting' has not received funding previously so I have provided further details below.

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)

To monitor, understand and forecast the responses of terrestrial and freshwater systems to changing climate, land use and pollution in order to provide solutions for their sustainable management at a range of spatial and temporal scales.

Activities (50 words)

- analysis and development of models and long term and large scale data systems
- identification of key events, processes and parameters for further study
- investigation of the mechanisms driving these events and processes
- development of ecosystem management and forecasting tools (models, indicators, monitoring systems and visualisation)

Achievements (50 words)

The section is a centre of excellence in environmental informatics; capture, management, dissemination and analysis of high-resolution spatial and temporal data, e.g. Countryside Survey and the Environmental Change Network. Analyses result in publication of scientific papers, provision of advice to governments and reports to contract customers (e.g. European Environment agency).

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.

Wildtracks and the Belize Audubon society have been involved in all stages of the project development. They are heavily involved with biodiversity conservation in Belize and this proposal has sprung from observations of gaps in current activities. This project has been initiated from the existing links between the project leader and Wildtracks. The project arises from a need to coordinate and collate information at larger geographic scales and to take an ecosystem level approach to understand the functioning of communities.
The roles of the overseas partners will be:

Wildtracks: identification of national biodiversity information gap for protected area management planning, identification of biodiversity assessment and monitoring sites within the protected areas, compilation of data on past land uses / impacts. Assessment and monitoring of herpetofauna within sites. Harmonization of ecosystem definition / mapping. Logistical planning & support. In-Country team recruitment. Long term staff fidelity and structured handover to new staff help ensure maintenance and transference of skills.

Belize Audubon Society (BAS): involvement from conceptualisation stage. As the largest and leading national conservation NGO, BAS will be the principal custodian of the project – providing office space, staff supervision, support and co-ordination. The full-time local project researcher will be under BAS management and is expected to become the BAS Research Co-ordinator on completion of the project – bringing extensive field research, monitoring and analysis skills to the organisation.

University of Belize: whilst field identification and survey skills are taught within the Natural Resources Management Programme at the University, expertise in such is largely limited to freshwater and marine ecosystems. The Faculty is very desirous of broadening the scope of such skills training, and readily entered the project when approached at the mid-stage planning. Whilst lacking the resources to be a primary partner in the execution of the project, the University of Belize will be a key recipient of the training and transference of skills that will be a significant additional output from the project.

In addition to the overseas partners we will also be collaborating with the Natural History Museum, UK. They have been working in Belize for many years and until recently funded a field station there. They have

expertise in species collection, habitat mapping and have access to useful data. They will provide expert advice, existing data, and enable consistency with methods, habitat types and species identification with other initiatives across Belize. Their international experience and role in research and conservation will enable consistency with other world-wide methodologies and initiatives.

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.

University of Belize: outline planning has taken place for the involvement of 3 selected undergraduate students for the duration of the project, as part of their 4-year Natural Resources Management degree. Dr. Ed Boles, as the Faculty Director, will administrate student involvement and time-tabling, and will explore the practicality of including the field-training of a broader spectrum of NRM undergraduates through participation in specific surveys.
Corozal Junior College, through its Environmental Club, will include field-training in the project for selected 'A' level students under its extra-curricular training / experience programme.

Belize Biodiversity Information System: continuing existing collaboration between BAS, Wildtracks and the BBIS assures access to all relevant biodiversity data on the system, pertaining to the monitoring sites and the protected areas.

Forest Department: the full support and collaboration of the Forest Department of the Government of Belize can be anticipated as the project will substantially add to the identified gaps in biodiversity assessments of the protected areas, and thereby greatly enhance conservation area planning and management at both local and national scales. In so doing the project will partially implement several of the needed actions noted in the Belize Biodiversity Strategy and Action Plan.

Communities: Community Leaders and Members have been identified in 4 stakeholder communities who have extensive knowledge of past land-use practices within the study sites. Their willingness to participate in the project and share their knowledge has been established.

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 is a new initiative, being developed in response to the recognition of absence of data on the relative biodiversity value of previously impacted forests, and their role and contribution within the national protected areas system. Whilst it builds on past and ongoing experience and studies of the UK and Belize project partners, the application of this experience to address the subject of the project is a new initiative.

Few studies of direct relevance have been undertaken in Belize. The Belize Tropical Forest Studies centre has conducted rapid assessments of the biodiversity within selected sites to investigate the recent impacts of Hurricane Iris (2001) and subsequent fire. Under its sustainable timber harvesting operations, Programme for Belize has conducted assessments of the immediate impacts of timber operations. Whilst both studies provide data in immediate impacts and/or short-term forest biodiversity changes and regeneration, neither has assessed biodiversity value of impacted areas relative to un-impacted areas nor explored changes in the medium to long-term. As such, the data-layers needed to add far greater accuracy and resolution to national and eco-regional conservation planning remain undeveloped. There has been research published by a number of scientists e.g. *Kupfer 2004 who looked at successional patterns on shifting cultivation fields which provide information on local scale plant diversity which will add to our proposal looking at ecosystem level variations. There have been developments in habitat mapping at a national scale (*Iremonger & Brokaw, 1995; Meerman & Sabido, 2001) although these lack the level of resolution required for conservation

planning. There have also been more detailed classifications at smaller scales (*Penn 2004) and we will work with these to produce vegetation classifications that will be compatible and can be widely applied. There have been studies of the relationship between soils and plants (e.g. *Furley 1987) which will be useful in understanding ecosystem functioning.
There has been a previous Darwin initiative project led by the Natural History Museum looking at 'The Effect of Intervention Practices on the Biodiversity and Sustainability of Belizean Forests'. This focused on variation in insect populations and we will try to incorporate any relevant information. Currently the Natural History Museum have a Darwin project looking at the conservation and sustainability of Xate palm but this is a very different project to our proposal. We will be working with staff from the Natural history museum so any mutual benefits will be realised.

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.

Improvements in integration of data and development of the understanding of processes affecting biodiversity will support the government to implement Articles 6 (5%), 7 (15%), 8 (10%), 9 (5%), 10 (8%), 12 (15%), 13 (5%), 17 (7%), 18 (5%)

In particular 'identification of components of biodiversity and monitoring' (Article 7), 'better in-situ conservation' by understanding ecosystem functioning, developing indicators of habitat quality and promoting sustainable development (Article 8) and research and training which contributes to the conservation and sustainable use of biological diversity (Article 12) are important.
This study falls under the thematic programme of forest biodiversity. Cross cutting themes include the ecosystem approach (20%) which is a very important component of this project as we intend working at large scales at three different areas across the country (good geographic spread) to increase understanding of function, processes and interactions between organisms and anthropogenic practices and to develop principles that will be transferable, indicators (10%) to summarise data on complex environmental issues which can be applied elsewhere and the Sustainable use of biodiversity (15%).
This work will provide information to assess progress towards a 2010 target of a significant reduction of the current rate of biodiversity loss as well as increasing understanding to restrict future loss.

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.

Objective 4 of Belize's National Strategy on Biodiversity is to "determine, document and monitor the status and value of Belize's biological resources", Objective 5 is to "strengthen and consolidate in-situ conservation". These two objectives are central to this project – the outputs of the study will significantly assist the Government of Belize's successful fulfilment of these objectives. The project will also be following the national strategies 6.4.7 and 6.4.8, pertaining to focused conservation research and the identification of research needs for forest and wildlife management in that it is designed to meet specific research needs to provide understanding of the value and role of impacted areas within protected areas, and enhance conservation area planning.

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

The project will contribute towards greater sustainability of livelihoods by providing information on the medium to long term impacts of various land-use practices – that can then be used by relevant agencies to help guide the development of enhanced sustainability of community initiatives. Adequate dissemination of the results of this project, to the communities, governmental and non-governmental development and aid agencies is therefore a critical activity in the final year of the project.

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 principal impact of this study will be in enabling focused biodiversity-directed management of protected areas that are critical to the conservation of national biodiversity. The assessment and monitoring of the biodiversity value, of areas regenerating from past anthropogenic impacts as compared with more intact tracts within the same ecosystem type and protected area, will enable greatly enhanced resolution of management zoning, definition of 'limits of acceptable change' and prioritisation of conservation actions.

Belize is in a unique position within the region in having an extensive system of protected areas covering over 40% of its area, what it lacks is adequate biodiversity baseline data on which to design management of these protected areas. This project will fill a very significant gap in the overall field of national biodiversity assessment, providing much-needed focused biodiversity valuations for integration into protected area management planning focused on the primary roles of biodiversity conservation and restoration.
The project will provide a resource base for conservation planning and scientific investigation. This will be in the form of; a computerised searchable database, including species and habitat data, records and spatial, trained personnel in species identification, biodiversity assessment and monitoring, GIS and integrated assessment, scientific papers on the value of secondary forest in terms of biodiversity and ecosystem function and dissemination of results to government and the wider community. The trained personnel will be staff in host country institutions, students from the University of Belize, Corozal college and local communities. The results will be disseminated by reports, scientific papers, workshops and where possible a variety of media types such as radio, newspapers, television will be made us of. Outputs will be disseminated in hard copy and by the World Wide web.

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

There are several legacies to this project:

- an established database
- Additional species and habitat information
- Transfer of skills to Belizean employees and students (future employees) from UK partners
- Transfer of knowledge to communities
- Integration of resultant data sets into national and local site conservation planning
- Improved scientific understanding
- Improved communication between partners
- Development of future proposals

The project will leave key staff in place both from Wildtracks and the Belize Audubon society (BAS). As the leading national conservation NGO, mandated by the Government of Belize to manage nine core national protected areas, BAS plays a very prominent role in the management of national biodiversity resources. With high levels of transparency and accountability it has earned extensive respect in the conservation field, and has demonstrated its ability to disseminate information (and skills) at a national level. Thus, whilst the outputs from this project will be directly accessed by the BAS conservation management planning team, it can also be expected to form the standard for focussed conservation action planning at a national level.

This project will also be important in the transfer of skills to students and young people which will be significant in building capacity for future conservation initiatives.

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.

The project will leave behind trained host country personnel and students, trained to varying degrees. There will have been transfer of skills in database management, GIS, field data collection, development of indicators and biodiversity assessment. There will be resources both in terms of infrastructure, computing facilities, transport, data in a computerised database, knowledge-interpretation of the data- disseminated by reports, scientific publications and workshops, increased understanding of the nature and functioning of secondary forests. Potential problems have been considered. It will be necessary for staff benefiting from

skill transfer to remain in post or actively contributing to conservation of biodiversity in Belize. This will be overcome by careful selection, motivation and provision of opportunities for staff, it is also hoped that many students and personnel will benefit from training to varying degrees, the more people that benefit the less likely that these skills will be lost. The host country institutions have had experience in environmental education, motivating and encouraging environmental awareness and increasing knowledge over many years. It is important that the results are used to improve conservation planning. We believe that this will be the case because the project proposal springs from a genuine need for the work to be done, from liaison and collaboration with government organisations such as the Belize forestry department. Outputs will be useful and carefully 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 Darwin logo and name would be made widely available on documents produced in the UK and in-country, as well as being included on web pages developed to advertise the project. There will be press releases prior to the launch and completion of the project, partner & stakeholder consultations, The logo will be widely used; on the vehicle, in communication and in publicity material.

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?

A significant additional output from this project (over and above the primary goal of the research itself) will be the training of local personnel, and the transference of skills. The most prominent skills gaps in the area of biodiversity assessment and conservation planning in Belize are in terrestrial botany, GIS and database development. Training of research staff at BAS in database use and GIS in a 5 day technical workshop will enable better use of data and be a valuable contribution to biodiversity assessment. The botanical skills (field identification, botanical collection, habitat identification, and assessment) will be addressed in a 2 day workshop and continued in work based training in the field. Through the training of a minimum of 3 University of Belize undergraduate students, 15 'A' level students, staff at BAS and Wildtracks, the UK partners in this project will significantly impact the in-Country capacity to professionally survey and assess Belize's diverse flora. Whilst there are good bird identification skills amongst Belize technicians, the training in field survey and analysis will be a valued output from the project. With the report from the 2004 Global Amphibian Assessment, it is clear that amphibians are in critical decline globally – not least in the biodiversity hotspot of Central America. The herpetology component of this project will include the training of University of Belize students, broadening the skills base of personnel able to make local and national assessments. Expertise to bring together all of these components to form an integrated assessment of the biodiversity value of secondary forest will be transferred from UK personnel to Belizean staff and students (5 day workshop).

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
Goal: **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** • **the conservation of biological diversity,** • **the sustainable use of its components, and** • **the fair and equitable sharing of benefits arising out of the utilisation of genetic resources**			
Purpose To provide the tools for enhanced biodiversity assessment and gap analysis for more effective conservation planning at the local and ecoregional scale.	Establishment of database of species and habitat information. Collection of additional data from secondary forest regenerating from two different landuse scenarios. Increased understanding of relationship between landuse and biodiversity shown by results of analyses. Development of indicators of habitat quality and biodiversity conservation value.	Reports by host and partner countries Field survey reports by partner institutions Scientific papers Field-testing of resulting predictive modelling & data	That data is spatially compatible. That the project is supported by local experts in species identification and historical changes in landuse.
Outputs Technical workshop Workshops and seminars on integrated assessment and biodiversity Database of biotic and abiotic data Recommendations for management Increased understanding of value of secondary forest and its role within the national protected areas system Reports Scientific papers	Host country personnel trained in database and GIS techniques At least 10 students from University College Belize and 15 'A' level students from Corozal to be involved in the project over the three years. Communication of project objectives and results to stakeholders Increased knowledge of distribution and habitat use of various species in Belize	Record of workshops and training Record of student involvement Copy of scientific papers, reports and management recommendations to Darwin Integration of resultant data sets into national and local site conservation planning	Staff to be trained remain in post and committed to the project That site conservation planners and protected areas managers continue to recognize the need to integrate this data within their work, to enhance biodiversity conservation in Belize

Activities Workshops and seminars	Yr 1: Project planning workshop with project team to establish priorities, methodologies and procedures (5 days); Project and biodiversity information seminar for local communities (1 day at 3 different locations); Technical workshop on databases and GIS (5 days).Yr 2, Yr 3: Research result workshops; Yr 3; Final workshop (5 days); Final project information seminar for local communities (3 days as above);
Establishment of database	Yr 1: Establishment of infrastructure for database and GIS. Staff in Belize trained to input data and carry out analyses. Identification of data gaps. Yr 2: Additional data added to database, Yr 3: Database maintained, staff identified to continue to maintain and develop after project lifetime.
Research programme	Yr 1: Gaps identified in data available for integrated assessment, collation of biotic and abiotic data from external sources where possible Yrs 2 and 3: Field collection of data, transects and plots established in natural and human regenerated areas; collection of land-use and historical information Yr 3: Integrated assessment of relationship between landuse and biodiversity. Identification of indicators of habitat quality.
Reports and Management recommendations	Yr 1: reports of workshops and seminars, summary of achievements in 01 identifying data gaps. Yr 3: Final report including data analyses and management recommendations.

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

Project implementation timetable		
Date	**Financial year**	**Key milestones**
May 2005	Apr-Mar 2005/6	Project initiation meeting: Project planning workshop with project team to establish priorities, methodologies and procedures
June-July 2005	Apr-Mar 2005/6	Project and biodiversity information seminar for local communities (1 day at 3 different locations)
June 2005	Apr-Mar 2005/6	Website established
June 2005- Apr 2007	Apr-Mar 2005/6 and Apr-Mar 2006/7	Collation of existing data, Gaps identified in data available for integrated assessment, collation of biotic and abiotic data from external sources where possible. Review in April 2006 at review workshop.
November 2005	Apr-Mar 2005/6	Technical workshop on databases and GIS (5 days), Staff in Belize trained to input data and carry out analyses.
Nov 2005-Apr 2006	Apr-Mar 2005/6 and Apr-Mar 2006/7	Establishment of infrastructure for database and GIS (completed system). Populate database with data available from partner institutions,
Apr 2006	Apr-Mar 2006/7	Review and planning workshop.
May 2006	Apr-Mar 2006/7	First year report to Defra
Apr 2006-May 2007	Apr-Mar 2006/7 and Apr-Mar 2007/8	There will be specific training in fieldwork techniques through field days and workshops as well as on the job training.
Apr 2006- May 2007	Apr-Mar 2006/7 and Apr-Mar 2007/8	Field collection of data, transects and plots established in natural and human regenerated areas; collection of land-use and historical information
May 2006-Apr 2007	Apr-Mar 2006/7 and Apr-Mar 2007/8	Update of database, ongoing training of staff
April 2007	Apr-Mar 2007/8	Research and training workshop on indicators, techniques for biodiversity monitoring and integrated assessment
May 2007	Apr-Mar 2007/8	Second year report to Defra
Apr 2007-Mar 2008	Apr-Mar 2007/8	Integrated assessment of relationship between landuse and biodiversity. Identification of indicators of habitat quality.
Mar 2008	Apr-Mar 2007/8	Final workshop (5 days)
Mar 2008	Apr-Mar 2007/8	Final project information seminar for local communities (as above 1 day at 3 different locations)
April 2008	Apr-Mar 2008/9	Final report to be widely circulated including data analyses and management recommendations
Sep 2008	Apr-Mar 2008/9	Scientific papers drafted

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

PROJECT OUTPUTS		
Year/Month	**Standard output number (see standard output list)**	**Description (include numbers of people involved, publications produced, days/weeks etc.)**
2005-2008	4A 4B 5	10 undergraduates and 15 'A' level students will receive training 5 training weeks will be provided 3 undergraduates from University of Belize will receive training over 3 years. One researcher and two field assistants from BAS and one Wildtracks trainee will receive training over three years.

November 2005 April 2006 April 2006-May 2007 April 2007	6A and 6B 6A and 6B 6A and 6B 6A and 6B	Technical workshop on databases and GIS, 5 people will receive 5 days training Review and planning workshop Training in fieldwork techniques, workshops and on-the-job training, 11 people will receive a total of 194 weeks training at workshop Technical workshop on integrated assessment and indicators, 10 people will receive 5 days training
May 2008	8	UK staff will spend a total of 48 weeks on the project
April 2008	9	There will be 3 species/habitat management plans produced
April 2008	10	There will be 12 guide books produced
September 2008	11A and 11B	There will be two scientific papers submitted /published
April 2006 April 2006-April 2008	12A 12B	Database to be established and handed over to host country Database to be enhanced and handed over to host country
April 2008 May 2008 2008	14A 14A 14B	Final workshop to disseminate results to scientists/policy makers and 3 short seminars to disseminate results more widely Production of final report incorporating management recommendations and development of further proposals. Attendance at international conference to disseminate results
May 2005-April 2006	20	Assets worth £9140 will be handed over to the host country
Apr 2006-May2007	22	Permanent field plots established
	23	£71 031 has been raised from other sources

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.

This project will be managed by the Centre for Ecology and Hydrology with collaboration with the Natural History Museum, Wildtracks and the Belize Audubon society. Activities will be mainly executed in the region while overall management of the project and financial control will be done from the UK. The project management will be subject to internal monitoring by CEH to ensure that aims and objectives are carried out on time and within budget. CEH subscribes to the Joint Code of Practice for Research.

Each of the indicators, establishment of database, workshops and training, collection of additional field data, updating the database, analysis of data and development of indicators and dissemination of results will be monitored. There will be regular communication between the partners by email and telephone. A programme of visits and workshops has been proposed where progress will be monitored. Training records will be kept for staff and students. There will be six monthly and yearly progress reports co-ordinated by the project manager. There will be a final report which will report on activities throughout the project.