



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: British Trust for Ornithology	Address: The Nunnery, Thetford, Norfolk IP24 2PU, UK
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2. Project title (not exceeding 10 words)

Conserving biodiversity in the modernising farmed landscapes of Uganda

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

Proposed start date: 1 June 2005		Duration of project: 3 years 7 months			
Darwin funding requested	Total	2005/06	2006/07	2007/08	2008/09
	£233,987	£65,915	£58,131	£64,615	£45,326

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

Identify best practice for the long-term conservation of biodiversity in selected farmed landscapes in Uganda and establish a framework for sustainable agricultural development and monitoring.

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

Details	Project Leader	Main project partner or co-ordinator in host country
Surname	Vickery	Kansiime
Forename (s)	Juliet	Frank
Post held	Head of Department	Acting Director
Institution	British Trust for Ornithology	Makerere University
Department	Terrestrial Ecology Unit	Institute of Environment & Natural Resources
Telephone		
Fax		
Email		

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

No

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)

The BTO encourages the wider understanding and conservation of birds and their habitats, through a partnership between volunteer observers and professional scientific staff. The Trust works closely with other government and non-government research organisations to develop and implement scientifically based, solutions to conservation issues, relating to birds and their habitats.

Activities (50 words)

The BTO has a pioneering role in bird surveys and research. Nationally, the Trust coordinates the efforts of 30,000 volunteer birdwatchers, providing monitoring information used by Government and NGOs. Specific projects look at links between birds and habitat change, at national and local levels, to explain population trends.

Achievements (50 words)

The development of a bird index within the UK and EU 'Quality of Life' indicators. A position at the forefront of research on birds in agricultural systems in the UK, particularly in terms of understanding and mitigating the impact of intensification. A training and advisory role abroad, particularly in Africa.

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.

The following organisations played an integral role in initiating and developing this project, and will assist in its implementation either through overseeing/managing it, contributing to project activities, or disseminating and communicating results. One member of each organisation will sit on the Project Steering Committee or the International PhD Supervisory Committee as appropriate. The Project Steering Committee will meet twice a year, with minutes circulated to all stakeholders and donors and posted on the project web site (hosted and maintained by the BTO in conjunction with project partners). In addition, the progress and quality of the science will be closely monitored by an International PhD Supervisory Committee (see below).

Makerere University Institute of Environment & Natural Resources (MUIENR) instigated the project and hosted a pre-proposal visit and workshop by BTO & RSPB staff. MUIENR will provide data from the National Biodiversity Databank (NBDB) and university supervisors will oversee the fieldwork and data collection for bird and insect groups (as well as bat pollinators) within study areas and demonstration farms. The Ugandan research staff will be overseen by an International PhD Supervisory Committee which will be chaired by BTO and include the UK-based partners (RSPB, Bournemouth) as well as DIIS (see below) and Ugandan PhD supervisors in MUIENR and elsewhere in the University (e.g. Department of Forest Biology and Ecosystems Management [see below]).

Makerere University Department of Forest Biology and Ecosystems Management Scientists based in this department (including Dr Philip Nyeko) were involved in pre-proposal discussions and will provide the entomological supervisory expertise required (particularly with respect to insect pollinators) by the PhD students and research assistants. These scientists will work closely with the International Supervisory Committee.

Department of Development Research, Danish Institute for International Studies, Copenhagen (DIIS). Dr Simon Bolwig was the Uganda-based leader of the International Food Policy Research Institute, Strategic Criteria for Rural Investments in Productivity (IFPRI-SCRIP) programme. He is now undertaking research, examining the effects of local market institutions on agricultural productivity, technology adoption and income in Uganda. Dr Simon Bolwig was involved in pre-proposal discussions and will provide the environmental/agricultural economic expertise required in three respects: first, to enable the PhD students to relate biodiversity findings

to the economic analysis of agricultural livelihood options already conducted by IFPRI; second, to estimate financial implications of any decline in numbers and/or diversity of pollinators (e.g. birds, bats and insects); third, to carry out an economic analysis of costs and benefits associated with novel management approaches trialled in the demonstration farms.

Ugandan Wildlife Society (UWS) developed, as part of the pre-proposal work, a strategy for influencing government policy and practice and disseminating results of this project to key targets (farmers, extension service providers and local government). The UWS has well-established skills in lobbying government at all levels and this will be one of their three main roles in the project. The first will include establishing an agricultural biodiversity working group to raise the profile of biodiversity issues in agricultural and environmental policies and to offer advice in relation to integrating biodiversity needs into existing and new policies. This will be achieved by the UWS being the main link between the project and major government policy initiatives (the Plan for the Modernisation of Agriculture and the National Agricultural Advisory Development Service). The second will be to develop and print educational materials (using the Darwin Publishing Unit – funded under a previous Darwin project [reference 6175], including a manual for agricultural extension service providers and leaflets and posters for farmers. UWS staff will work closely with NU staff in particular to ensure that appropriate materials are produced for fora discussion with farmers and open days on demonstration farms. Similarly, they will work closely with NAADS staff to ensure the draft manual is produced for the workshop for NAADS advisors and the final manual is produced for the presentation to Government and other stakeholders at the end of the project. Their third role will be to publicise the project findings on local and national radio.

Nature Uganda (NU), Uganda's BirdLife partner, has been involved in pre-proposal discussions relating to the translation of research results into policy and practice. The strength that NU will bring to this project will be their experience in community-based conservation initiatives, e.g. championing critical sites, especially Important Bird Areas, and working with communities in Wakiso, Bushenyi and Kabale on sustainable land use issues. NU will therefore be central in providing a direct link to local communities. NU's role in linking with local communities will involve assistance in identifying study sites for fieldwork being carried out by MUIENR, trialling posters and leaflets for farmers, running regular discussion forums and establishing demonstration plots, where novel approaches can be trialled to develop farmer-friendly management practices. The NU post will oversee the day to day management working closely with the BTO project manager and the Steering Committee to ensure that the work plan is adhered to and key milestones are met.

Plan for Modernisation of Agriculture (PMA). A major policy initiative, the PMA is Uganda's framework for eradicating poverty by transforming the livelihoods of subsistence farmers. Its vision is "Poverty eradication through a profitable, competitive, sustainable and dynamic agricultural and agro-industrial sector" and aims to promote farming systems and land use practices that conserve and enhance land productivity in an environmentally-sustainable manner. Pre-proposal discussions and follow up correspondence were held with Dr W. Odwongo (Director of the PMA Secretariat), to ensure that the results of this project can be fully integrated with the economic and natural resource goals of the ongoing implementation of the PMA. UWS will work with PMA, particularly their Natural Resources subcommittee, to identify and implement the best ways to integrate the results of this work into new and existing Government policies, particularly through the establishment of an agricultural biodiversity working group.

National Agricultural Advisory Development Service (NAADS). NAADS contracts (private) agricultural service providers to provide agricultural extension advice requested by local farmer groups and farmer based committees (e.g. farmer foras) at the sub county level. Pre-proposal discussions and follow up correspondence were held with the Director, Dr F. Byekwaso about ways in which the NAADS and the private agricultural extension service providers (hereafter referred to as service providers) registered under NAADS could be involved in the project. Two key roles were identified: first in engaging farmers as stakeholders in the project and, second, encouraging the adoption of 'best practices' (economic and environmental) identified by the project. NAADS will take the lead on translating the results into practical and sustainable solutions for farmers with the particular help of the NU/UWS post holders. This will be done by raising

awareness of biodiversity issues among NAADS district and sub-county coordinators and the private (extension) service. Coordinators and providers will be trained in practical approaches to integrating biodiversity and farming, through two workshops and the production of a manual, thus enhancing the biodiversity benefits of the advice given by agricultural extension service providers to a much wider audience of farmers.

National Environment Management Authority (NEMA). Pre-proposal discussions have been held to ensure that this project addresses Uganda's Convention on Biodiversity (CBD) requirements, in terms of overall aims, questions addressed, knowledge gathered and the approaches adopted to ensure research results are translated into practice and policy (see sections 11 and 12). Their continued involvement, via the Steering Committee and ultimately the agricultural working group established as part of the project will ensure that results are integrated into the relevant national strategies and action plans e.g. the National Biodiversity Strategy and Action Plan (NBSAP).

Royal Society for the Protection of Birds (RSPB – a UK project partner) has expertise of work on international agricultural issues, both research and policy, and supports NatureUganda and a network of other BirdLife Partners within Africa. Dr Paul Donald is an expert on the biodiversity impacts of various agricultural commodity production systems, particularly coffee, and will visit Uganda once each year for 2 weeks. Initially RSPB will be involved with the study design of the research but will also use its considerable expertise in communications and policy development to enhance the capacity of the NU and UWS post holders to communicate the research findings to policy makers and agricultural service providers.

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.

During the pre-proposal visit, stakeholders from government, farming organisations and the conservation community were invited to a round-table discussion. At this workshop, the project was discussed and modified to meet the needs and engage support of stakeholders. The aims were to (i) discuss the importance of biodiversity in Uganda for conservation and sustainable agricultural development, (ii) discuss how agricultural practice may change in the light of Government policy and (iii) discuss and develop this project, especially the mechanisms of delivering the results of the project. The workshop and associated meetings with stakeholders were extremely important in several respects. The discussions highlighted the potential for massive changes in agriculture in Uganda in the near future and the importance of agricultural landscapes outside the Protected Areas network for the country's biodiversity. There were clear concerns that, although this was recognised, a lack of knowledge and funds severely restricted the possibility of considering biodiversity needs within plans to modernise agriculture. The stakeholder workshop called for work designed to (i) quantify levels of biodiversity associated with different cropping systems, particularly beneficial species/groups such as pollinators, and trial any modifications that might enhance biodiversity in sustainable farming systems, such as provision of fruiting trees for economic and pollination benefits, community/smallholder wood lots, tree lines along rivers to conserve water and enable movement of wildlife etc, ii) communicate these findings to farmers, largely through improved advice from agricultural extension service providers, and to policy makers by, wherever possible, feeding results into existing national plans and strategies relating to agriculture as well as conservation of biodiversity.

Twenty people from 13 organisations attended the workshop, including Mr. Bob Ogwang, the CBD focal point from NEMA. Further one-to-one meetings were held with stakeholders identified at the RTD, including Dr Willie Odwongo, Director of the PMA Secretariat and Dr Francis Byekwaso (Director of the NAADS). These two organisations are key to integrating the results of this project into policy and practice and both organisations have provided letters of support. Meetings were also held with other government departments, including Wetland and Forestry Inspection Divisions and the Permanent Secretary of the Ministry of Water, Lands and Environment (MWLE), responsible for natural resource management in the wider countryside. They also echoed the need

for such work and supported the project. We also met industry representatives (Eastern African Fine Coffee Association) to discuss how changes in agriculture could affect one of Uganda's major agricultural exports and how marketing coffee as 'wildlife friendly' could add value to farmer's crops. These industry representatives will also be invited to join the Steering Committee and to attend relevant project workshops.

The involvement of local communities is an integral part of the project and vital to its success regarding the implementation of results. The link with these communities will be largely via the NU/UWS project staff and NAADS coordinators and service providers. This will be achieved through regular discussions with local communities. The PhD students will be required to produce annual summaries and presentations of their work for farmers in the communities where the field-work is based and to present these verbally at the discussion fora. There will also be regular contact between PhDs and farmers during field-work, when study aims/rationales/results will be communicated directly to farmers. Final results and recommendations of 'best practice' will be disseminated through posters and information leaflets together with a manual for agricultural service providers. Although the main target audience of the demonstration farms will be those with influence on agricultural policy and extension (NAADS secretariat and local coordinators and farmer fora), farmers in nearby communities will also be invited. This will help to ensure they are actively engaged in the process of participatory technology transfer.

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 an entirely new initiative, but builds on a pilot project recently led by the International Food Policy Research Institute (IFPRI). Traditionally the wider countryside has been particularly under valued for its biodiversity. Funding has tended to focus on biodiversity hot spots and protected areas. This project addresses this gap in biodiversity conservation and research. The IFPRI study provided preliminary information on patterns and trends in biodiversity (trees and other woody vegetation, and birds) in relation to agricultural land use in a small sample of smallholder and large-scale farming systems in the western and central regions of Uganda. IFPRI has also undertaken economic analyses of sustainable rural livelihood options for Uganda, including a special study on nature-based options, and the biodiversity assessments made of farming systems in this project will be related to these analyses. The proposed project will, however, develop and significantly extend the themes in this IFPRI/MUIENR pilot work. Specifically, it will target one of the major farming systems (the banana / coffee arc around Lake Victoria), expanding the number of sites and stratifying the sample of sites across an intensity gradient, ranging from smallholder mixed-cropping systems of different land-use intensities to large agricultural systems characterised by mono-cropping and high use of fertilisers and pesticides. It will also focus on additional taxonomic groups (insects and, to a lesser extent, bats). Furthermore, the proposed project will undertake a series of activities that did not form part of the IFPRI project, including (i) capacity building of partners in Uganda, (ii) identification of indicators and collection of baseline data to enlarge the scope for future monitoring of biodiversity (particularly birds and insects) in agricultural systems in Uganda, (iii) identification of best practice regarding sustainable land use options in Uganda, (iv) dissemination of best practice to agricultural development agencies and service providers and selected local communities within Uganda, (v) policy advice to the Ugandan Government. We expect the results to be applicable to similar agricultural systems elsewhere in eastern Africa and that the approach adopted could serve as a framework for addressing similar issues even further afield.

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.

This project directly addresses all four of the elements of the **Programme of Work for the CBD Thematic Programme on Agricultural Biodiversity**. Namely:

- **Assessment:** by providing a country-driven assessment of the status and trends of agricultural biodiversity (primarily birds and insects) in Uganda, gaining an understanding of the underlying causes of those trends, developing and applying indicators and assessment methodologies and identifying biodiversity-friendly agricultural practices.
- **Adaptive Management:** by identifying and promoting adaptive management practices, technologies and related policy and incentive measures that promote the positive and mitigate the negative impacts of agriculture on biodiversity (particularly birds and insects) including enhancing knowledge, understanding and awareness of the goods and services provided by the different levels and functions of agricultural biodiversity. This could be through, for example, government support for organic practices.
- **Capacity building:** by promoting the participation and strengthening capacities of NAADS service providers (and hence farmers) in the sustainable management of agricultural biodiversity, through enhancing partnerships with researchers and extension service providers and providing opportunities for farmers (through farmer fora) to participate in the development and implementation of national strategies for agricultural biodiversity.
- **Mainstreaming:** by supporting coordinated and integrated national policies, strategies, programmes and action plans, through the provision of training materials and capacity building at policy, technical and local levels, in relation to the conservation and sustainable use of agricultural biodiversity.

The proposal is also relevant to the cross-cutting issue of the **International Initiative for the Conservation and Sustainable Use of Pollinators** by assessing the status and trends of pollinators, causes of declines and potential impacts and promoting the conservation and sustainable use of pollinator diversity in agricultural systems.

Three key areas of the project will assist the Ugandan Government to implement a range of **Articles within the CBD**: (i) Training and capacity building of researchers, government and non government key personnel and users; (ii) development of approaches to integrate biodiversity and agriculture, and (iii) establishment of baseline data and identification of indicators with which to measure future trends in agricultural biodiversity. These address CBD Articles:

Article 6 General measures for Conservation and Sustainable Use (10%) through the identification of both biodiversity- friendly and economically viable cropping systems

Article 7 Identification and Monitoring (15%) through the identification of key indicator species within agricultural landscapes, setting up of monitoring plots, surveying of existing monitoring plots and contribution to the National Biodiversity Data Bank (NBDB)

Article 8 In-situ Conservation (10%) by working with farming organisations (e.g. farmer fora and extension service providers) to promote biodiversity friendly practices within the Ugandan farming systems.

Article 10 Sustainable use of components of Biological Diversity (5%) through the sustainable use of non-crop products and bushmeat in habitats outside the immediate cropping area (e.g. community wood lots, fruiting trees, tree corridors along water courses for water conservation).

Article 11 Incentive measures (5%) As farming becomes more commercial in Uganda, we will identify farming practices that do not further degrade the farmed environment and encourage a change in policy to promote farming systems that enhance biodiversity (e.g. 'lifestyle' crops such as bird-friendly coffee, organic produce).

Article 12 Research and Training (15%) will be a major part of the project and the project will leave a legacy of trained staff able to tackle biodiversity issues in the future.

Article 13 Public education and awareness (10%) by linking the research to agricultural service provision within farming communities as well as national press releases & radio interviews, dissemination of information through partner magazines and newsletters..

Article 14 Impact assessment and minimizing adverse impacts (10%) through the identification of agricultural practices that have major impacts on biodiversity and identification of practical measures to mitigate these.

Article 16 Access to and transfer of technology (10%) through the training of agricultural extension service providers in biodiversity friendly farming practices who will, in turn, make the advice available to a much larger number of individual farmers. These practices will be made available in manual form for service providers and other and developed so they can be broadcast in media that will be accessible to farmers (e.g. posters, radio broadcasts)

Article 17 Exchange of information (5%) All project staff will benefit from being involved in a major international project. Making research information available to others is a key component of this project. Research findings will be communicated to policy advisors in the PMA, which is a major Government initiative. Also information will be exchanged further down the chain to individual farmers by training of agricultural service providers. Results will be made available in the form of papers and the PhD students will present their work at a major international conference.

Article 18 Technical and scientific co-operation (5%) This project involves researchers from a number of highly-regarded research-based organisations from the UK, Uganda and Denmark who will be working with both policy-based and technical advice-based organisations within Uganda.

The CBD National Focal Point, Mr Bob Ogwang at the National Environment Management Authority (NEMA), attended the round table meetings as part of the pre proposal project. He is fully supportive and will be part of the Project Steering Committee. NEMA will not otherwise be directly involved as the key agencies working within the farmed environment will be the PMA and NAADS.

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.

The intensification and expansion of crop and livestock production is the most important influence on land use, land cover and biodiversity in Uganda (Uganda's second report to the CBD) Agricultural development is a major cause of biodiversity loss and continues to result in rapid reduction and degradation of terrestrial habitats. At the same time, two major policy initiatives in Uganda (the **Plan for the Modernisation of Agriculture** or PMA and the **Poverty Eradication Action Plan** or PEAP) agree that sustainable and productive land use is the key to economic growth and poverty eradication in rural Uganda. In its report to USAID/Uganda the International Food and Policy Research Institute (IFPRI) identified an urgent need to develop more effective and environmentally sound land use systems to reverse the country's long-term decline in environmental quality and agricultural productivity¹. In Uganda, the population density is predicted to increase from 121 people per km² in 2002 to 164 in 2015², and 25% of the land will have population densities between 200 and 500 people km². Together with market expansion this will exert pressure on biodiversity through the adoption of ever more intensive land use practices.

In its 2nd **National Report to the CBD**¹ Uganda afforded high priority to the implementation of an agricultural biodiversity work programme but highlighted the limited resources available. This project contributes directly to all five of the strategic objectives identified in **Uganda's National Biodiversity Strategy and Action Plan**³. Namely:

- Develop and strengthen co-ordination measures and frameworks for biodiversity management. By establishing baseline data, monitoring sites and protocols, enhancing the level of biodiversity advice available to farmers through extension service providers, establishing an agricultural biodiversity working group to feed into government policies and promoting a community ownership of biodiversity.
- Facilitate research, information management and information exchange on biodiversity. By providing training for 2 PhD students and up to 6 research assistants in Uganda, inputting data gathered into the National Biodiversity Data Base (NBDB), producing scientific

- publications, a manual, information leaflets and posters.
- Reduce and manage negative impacts on biodiversity. By identifying and promoting best practices within sustainable agricultural systems that maintain and enhance biodiversity
- Promote sustainable use and fair sharing of costs and benefits of biodiversity. Through working with local people to provide low cost biodiversity enhancement measures and by raising the awareness of the value of this biodiversity.
- Enhance awareness of biodiversity issues among stakeholders. Through published literature, workshops and discussion forums, the establishment of demonstration farms with open days and an agricultural biodiversity working group.

An economic assessment, prepared as part of the **Ugandan National Biodiversity Strategy and Action Plan** (UNBSAP)⁴, emphasises the high economic value of biodiversity locally, nationally and globally and the vital need to demonstrate this value to those who incur any costs of conserving it, including where it might compete with increasing agricultural productivity. This project will address this issue by gathering knowledge and raising awareness of the value of specific elements of biodiversity, for example, pollinators within agricultural systems and populations of natural predators.

Uganda's National Environment Action Plan and National Environment Management Policy (easd.org.za/afenstr/Uganda/Envpol1.htm)⁵ stresses the importance of linking development and environmental management to attain sustainable development, as well as the need to address environmental problems, such as loss of biodiversity, deforestation and soil degradation, in a comprehensive and integrated way. To achieve efficient resource use and tackle environmental degradation and loss of biodiversity, the plan states a clear need for, amongst other things, "*transformation of existing management systems, evolution of new conservation culture and establishment of effective monitoring and evaluation systems*". This project will contribute to all of these areas of work. Specifically it will meet objectives relating to *Environmental Information* (to collect analyse store and disseminate reliable information relating to environmental issues including biodiversity) and *Conservation of Biological Diversity* (to conserve and manage sustainably the country's biological diversity in support of national socio-economic development).

The integration of rural economic growth, agricultural modernisation and sound environmental management is critical if the Government is to deliver successfully on its **Poverty Eradication Action Plan** (PEAP) and the **Plan for the Modernisation of Agriculture** (PMA)⁶. The current project is designed explicitly to support these initiatives. **Uganda's Poverty Reduction Strategy** (PRS) highlights the importance of poverty-environment links⁷. DFID provided technical support to NEMA for the mainstreaming of environment and sustainability into the PEAP and the PMA. This process identified a number of approaches to strengthen the sustainability of the PEAP and this project specifically addresses two of these directly: (i) '*Increased Knowledge and Awareness*' e.g. natural resource management and raising awareness of the impact the environment has on the poor, (ii) '*Sustainable Agriculture*' e.g. sustainability benefits from diversification and the value of advice to farmers on environmental sustainable low input production systems.

The **USAID/Uganda's Strategic Objective SO7 Expansion of Sustainable Economic Opportunities for Rural Sector Growth** aims to integrate the country's agricultural growth and rural livelihoods needs with responsible environmental management. Phase one has been completed and provides an assessment of strategic land use options for Uganda. It highlights the need for more empirical data and more intensive research, focused on key pathways such as the link between predicted expansion in banana and coffee production and the resulting impact on agricultural productivity, human welfare and natural resource conditions. This project will provide such data for the range of agricultural systems found within the banana/coffee production systems found over much of central Uganda.

References

1. Bolwig, S., S. Wood, and J. Chamberlin. 2003. A Spatially-based Planning Framework for Sustainable Rural Livelihoods and Land Uses in Uganda. SCRIP Phase II Completion Report Submitted to USAID/Uganda. International Food Policy Research Institute, Washington, D.C.

2. Bolwig, S., S. Wood and J. Chamberlin. Forthcoming. Identification and Evaluation of Strategic Options for Sustainable, Smallholder-lead Rural Growth in Uganda. International Food Policy Research Institute, Washington, D.C. In press.
3. Uganda National Biodiversity Strategy and Action Plan First Edition April 2004 NEMA, Kampala
4. Emerton L & Muramira E 1999 Uganda Biodiversity: Economic Assessment. Prepared with NEMA as part of Uganda NBSAP. IUCN
5. The National Environment Action Plan for Uganda. The National Environment Management Policy (<http://easd.org.za/afenstr/Uganda/Envpol1.htm>)]
6. PMA progress report December 2000 - June 2003 PMA Secretariat, Kampala
7. DFID Sustainable Development Unit keysheet November 2000 Issue 4 Integrating sustainability into PRSPs: the case of Uganda

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

Sustainability is based upon a balance between productive agricultural land and the retention of natural resources. Throughout much of rural Africa, and Uganda in particular, unregulated agricultural expansion has been a major cause of biodiversity loss in recent decades, through the reduction and degradation of terrestrial habitats through, loss in soil fertility, soil erosion and loss of natural vegetation. Although the increase in demand for agricultural land is mostly due to population growth, low agricultural productivity (yields) has also been a major driving factor. Slow progress in agricultural development has contributed to widespread rural poverty and stagnant or negative economic growth. Low agricultural incomes have, at the same time, increased pressure on natural resources (e.g. harvesting of timber and bushmeat), by making more people, especially the poor, more dependent on such resources for their livelihoods. Increasing agricultural productivity could therefore decrease pressure on biodiversity in non-agricultural areas.

There is therefore an urgent need for an integrated approach to land use that can promote the sustainable development of rural communities by increasing productivity of agricultural land, while at the same time conserving biodiversity. Likely measures to improve levels of biodiversity on farmland, such as the retention of tall trees, increased diversity of non-crop habitats and provision of suitable habitats for honey-producing systems will also contribute to improved sustainable livelihoods by improving soil conditions, reducing erosion and increasing the diversity of products that can be harvested by farmers (e.g. fuel wood, honey and bushmeat). It is only through this integrated approach to land use planning and agricultural development that environmental conservation can be successfully strengthened. There is thus an urgent need for improved livelihood options that are genuinely sustainable and that involve integration of biodiversity conservation with agricultural development and economic growth. The identification of such livelihood options, such as, for example, certified shade-grown coffee that simultaneously enhances producer prices and habitats for tree-dependent birds, is a central objective of the current proposal.

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.

This project will identify sustainable livelihood options for farmers in Uganda, by assessing the environmental impacts of different approaches to agricultural land use and relating these to socio-economic data. This will be achieved through a programme of research and capacity building, enabling the impacts of agricultural land use to be identified and monitored by Government and NGOs using the NBDB held at MUIENR. Ultimately, the project will help enable agricultural systems and landscapes to be developed that are rich in biodiversity and supporting rural livelihoods. The research and implementation will be based on the highly successful research and development projects undertaken by BTO with respect to agricultural biodiversity within the UK and more recently in west Africa.

Through research conducted by the PhD students in the banana-coffee area around Lake Victoria study sites, the project will first document the biodiversity within key taxonomic groups (particularly

birds and insects & to a lesser extent bats, including beneficial species such as pollinators) associated with the different types and intensities of agricultural land use. We will thereby gain an understanding of the underlying causes of biodiversity loss, and determine the status and possible trends of this biodiversity. The work will also establish baseline data and identify suitable indicators with which to monitor future change in the said taxonomic groups. This information will be used to develop practical land management approaches that integrate sustainable agricultural production with the conservation of biodiversity.

The results of the project will be disseminated as widely as possible to popular, political and scientific audiences, including all stakeholders and donors. This will be achieved on a continual basis throughout the project via annual reports, bi-annual Steering Committee minutes, newsletters produced for the local community, regular articles in the newsletters produced by the organisations listed in section 8 and features on local radio. As many of these reports as possible will be available on the web site managed by the BTO. Demonstration farms, where novel approaches can be trialled, will also be used to communicate results through open days. Final communication outputs will include a manual for agricultural extension service providers detailing 'best practices' that integrate biodiversity needs and sustainable farming, leaflets and posters for farmers, scientific presentations (oral and written) and a final report for stakeholders and donors. Data collected will be fed into the NBDB and study sites georeferenced to ensure that they can be used as long term monitoring sites.

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

The legacy of this project will be strengthened capacity within Uganda to work for the sustainable development of agriculture and meet its biodiversity obligations within the country, the impact of which will be felt for many years to come. The ability of the Ugandan Government to meet its obligations under the CBD will be enhanced, as training of key personnel is an important element of the project. This training relates particularly to the CBD Thematic programme on Agricultural Biodiversity that depends on strengthening Uganda's ability to assess status and trends in biodiversity and to identify and promote land management policies and practices that conserve and enhance it, as well as improving links between policy makers, researchers, farmers and agricultural extension service providers. The project will result in the production of a manual for extension service providers detailing land management approaches that integrate agricultural productivity and biodiversity conservation. This manual will incorporate relevant information from similar studies in East Africa, which will be collated as part of a literature review.

A number of people will receive specific training over the duration of the project: two African researchers to PhD level; 6 research assistants (2 per year) will be trained in field skills required for biodiversity assessment and monitoring, and data manipulation; two NU/UWS staff will receive training in biodiversity assessment (particularly birds and insects) participatory technology development, proposal writing and raising of public awareness; up to 50 NAADS coordinators and extension service providers will receive training through a workshop and manual relating to practical approaches to integrate biodiversity and agriculture. The 2 PhD students will benefit from two intensive courses in use and application of GIS systems at Bournemouth University. All professional staff involved in the work will benefit from their engagement in a high-profile, international collaborative project and from the expertise of the UK partners. At least 12 of the study plots used in the field research will be established in a way that ensures their availability for long-term monitoring. The data collected during the course of this project will provide a baseline from which to measure future change in habitats and species. In addition, the project will identify suitable indicators of status and trends in biodiversity associated with agricultural systems (particularly birds and insects).

Sustainability will be achieved through the development of proposals to fund key areas of work after the completion of the project. We envisage three areas where future funding will be particularly valuable; 1) follow up projects that apply participatory technology development building on learning through hands on experience in farmer field schools, particularly with respect to maintaining and developing demonstration farms and integrating biodiversity conservation into

national strategies such as the PMA. In addition, the project will deliver an enhanced capacity of Ugandan NGOs and Government officers to develop such proposals. RSPB is committed to supporting Ugandan NGOs for many years to come, and Nature Uganda is supported by the BirdLife Partnership through the global partnership of BirdLife International. This support will enable the best practices identified by the present project to be further developed and adapted to local conditions in other areas of the country, advocated and disseminated well beyond the end of the project.

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 is intended to provide Government and NGO development and conservation organisations and agricultural extension service providers in Uganda with the knowledge and capacity necessary to develop and promote land management approaches that integrate agricultural productivity and biodiversity conservation. All of the Ugandan organisations involved in this project are well-established and reputable agencies that will provide the institutional framework to ensure that the work is continued beyond the duration of the project. The project is designed to strengthen the capacity of Ugandan partner organisations to attract further donor support to continue project activities. Outputs of the project include funding proposals to continue aspects of the work after the end of the current project (see section 15). Other written project outputs (scientific papers, leaflets, posters and the manuals) will be available as standard reference sources for Uganda and have beneficial use long after the grant ends. In the course of the project an agricultural working group will be established to raise the profile of biodiversity issues in agricultural and environmental policies and to offer advice in relation to integrating biodiversity needs within existing and new policies. The project team will work with all project partners to identify and approach key members, to establish the most effective way for this group to work with government ministries and departments, such that outputs and activities are streamlined into strategies and plans, and to find ways to ensure the working group can be maintained into the future.

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

All project outputs, including press releases, will acknowledge Darwin funding and where appropriate carry the Darwin logo. A project web site will be established bearing the Darwin logo and including a link to the Darwin Initiative internet site. The field vehicles and the demonstration farms (as well as the leaflets and posters and manual) will all carry the Darwin logo.

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 is central to this project in a number of respects:

Two African researchers will be registered for PhDs at Makerere University and required to submit theses by the end of the project. These PhD posts will be advertised internationally and candidates shortlisted by the International Supervisory Committee. Shortlisted candidates will be formally interviewed and selected on the basis of their academic, field and interpersonal skills. These candidates will receive training in research design and implementation, biodiversity survey methods (particularly for birds and insects and to a lesser extent bats), data management and spatial analysis techniques (including GIS) and reporting research results to an international standard. The training will involve direct academic supervision in Uganda and the UK by both Ugandan and UK staff. Spatial measures of habitat extent and/or quality will be collected as part of the field data collection, and GIS will be used to characterise diversity (e.g. fragmentation indices of land use) at the landscape scale. Two week-long GIS training courses will be run for the Ugandan PhD students by Bournemouth University.

The effectiveness of this training will be assessed by regular assessments of student progress by the International PhD Supervisory team and through the peer review of scientific papers produced and examination of the theses. Once awarded their postgraduate degrees, it is expected that these students will be in a strong position to train others.

In each of the first three project years, two Ugandan research assistants will each receive intensive training in field techniques, survey and census methods and data handling and manipulation. This will be provided by RSPB, BTO and MUIENR staff and the PhD students. These assistants will be selected by interview by a sub-group of the Steering committee. The effectiveness of this training will be measured by regular assessment of performance by project managers and by the ability of research assistants to undertake more advanced and independent work. Depending on the quality of the assistants they could be registered for a MSc qualification at Makerere University.

Two NU/UWS staff will also receive training in biodiversity assessment (particularly for birds and insects and to a lesser extent bats), participatory technology development, fundraising and raising of public awareness. The effectiveness of this training will be assessed largely through the successful establishment of at least two demonstration farms (as well as accompanying leaflets and posters), the production of a manual for agricultural extension service providers and heightened awareness within agricultural policy makers of the importance of biodiversity in agricultural systems. These NU/UWS staff will benefit from the help of professional BTO and RSPB fundraisers and communicators.

All NAADS coordinators, operating in 29 districts and 280 sub-counties (approximately 30 coordinators) and up to 20 other agricultural extension service providers will be invited to attend two training workshops, run by BTO/RSPB and NU/UWS postholders. This will focus on practical approaches to integrating biodiversity (particularly for birds and insects and to a lesser extent bats) into sustainable agriculture. This workshop will be held over three days and involve a visit to the demonstration farms. The success of this will be assessed through a questionnaire feedback form. Although the numbers seem low, each NAADS service provider operates within a number of farming communities and will thus reach a much larger network of hundreds of farmers.

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.

NOTE: This logframe has been modified in response to the comments in the Stage 1 letter. In particular, we have added a specific item relating to the way in which the project builds capacity in Uganda we have been more specific about the means of verification (e.g. by detailing numbers of reports, papers and workshops).

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>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</p> <ul style="list-style-type: none"> • the conservation of biological diversity, • the sustainable use of its components, and • the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources 			
<p>Purpose Identify best practice for the long-term conservation of biodiversity in selected farmed landscapes in Uganda and establish a framework for sustainable agricultural development and monitoring.</p>	<p>Advice on best practice disseminated to policy makers and agricultural extension service providers and integrated into agricultural development strategies by year 4. Baseline data, field and analytical protocols established for monitoring agricultural biodiversity (birds and insects) by year 3.</p>	<p>Advisory materials, training workshop reports, policy documents, scientific papers.</p>	
<p>Outputs 1. Project management systems in place and effective communication across project partners established.</p>	<p>Activities on schedule, milestones met throughout the project. All project partners have access to all project outputs. Project partners are fully aware of roles and responsibilities and reporting dates and collaborating on all relevant project activities.</p>	<p>Annual and final Project reports. Bi-annual Steering Committee minutes. Distribution lists of all project partners, stakeholders and donors. Project web site established.</p>	<p>Project area remains safe to work in.</p>
<p>2. Relationships between biodiversity and farming practices are understood and best practices (including novel approaches) identified.</p>	<p>Effects of changing agricultural policies and practices on biodiversity can be predicted by year 4. Biodiversity indicators identified and best practices (including novel approaches) described and documented by year 4.</p>	<p>At least 4 Scientific papers submitted to peer review journals on project completion. Annual and final project reports. Bi-annual supervisory and training visits to Uganda by UK staff. Two exchange visits to the UK by PhD students.</p>	<p>Project area remains safe to work in. Farmers remain receptive to the project.</p>
<p>3. Economic importance of on-farm biodiversity and its loss, and economic implications of novel land management approaches are identified and quantified.</p>	<p>The financial implications of changes in farmland biodiversity (particularly loss of pollinators) can be assessed and predicted by year 4. Best practices identified are related to income (from existing IFPRI data) and costs and benefits of novel approaches can be assessed by year 4.</p>	<p>At least 2 of the 4 scientific papers submitted to peer review journals will include consideration of economics. Annual and final & project reports. Two training visits by DIIS staff.</p>	<p>Project area remains safe to work in. Farmers remain receptive to the project</p>

<p>4. Capacity enhanced in agricultural biodiversity science, policy and practice</p>	<p>At least two African students trained to PhD level and up to 6 research assistants trained in biodiversity survey and census techniques. At least 50 NAADS agricultural service providers attend two training workshops in biodiversity assessment. Two NU/UWS staff trained in biodiversity assessment, participatory development proposal writing and raising of public awareness. Agricultural working group established</p>	<p>Two PhD theses submitted and at least 4 scientific papers submitted. Training manual produced, trialled and distributed to agricultural extension service providers with leaflets and posters for farmers. At least 3 open days held for agricultural policy and extension service providers at demonstration farms, Articles produced for popular press and at least 2 radio broadcasts per year. Biodiversity issues integrated into existing and new Government policies.</p>	<p>Farmers Government and NGOs remain receptive and committed to the project</p>
<p>5. Best practices, including novel approaches translated into practical advice for farmers</p>	<p>Increased awareness of and hands on experience with biodiversity issues and increased recognition of the value of biodiversity among farmers within the study area by year 2 and from nearby communities by year 4. Ability and willingness by these farmers to adopt and trial novel land management approaches by year 4. At least 50 NAADS agricultural extension service providers trained</p>	<p>At least 2 demonstration farms established with at least three open days for all stakeholders including local communities. Annual discussion fora between NU/UWS and farmers. Leaflets and posters produced for farmers. Two workshops for NAADS agricultural extension service providers. Increased knowledge and understanding of how to integrate the needs of biodiversity with sustainable agricultural practices supported by a manual of best practices.</p>	<p>Farmers remain receptive to the project</p>
<p>6. Policy and relevant advice developed within the project is available to all relevant parties and stakeholders</p>	<p>Information and materials on best practices packaged and distributed to policy makers and agricultural extension service providers by year 4. Biodiversity and agricultural manual produced for extension service providers and distributed by year 4. Two demonstration plots. Two supplementary funding applications submitted to potential donors by year 4.</p>	<p>Annual and final project reports. Bi-annual reports from all Steering Committee meetings and two workshops. One training manual produced and advisory leaflets and posters for farmers. Demonstration plots established. At least 2 grant applications submitted. At least 3 national press releases in Uganda and one in the UK in each project year. At least two radio interviews/broadcasts each project year for national and local radio stations</p>	<p>Relevant government authorities maintain their support for the project.</p>
<p>7. System for long term monitoring of agricultural sustainability is established.</p>	<p>Readily repeatable, spatially referenced multi-taxa data collected and entered into National Biodiversity Database (NBDB) by year 4. Monitoring methodology/ protocol established and study sites geo referenced by year 4.</p>	<p>Data entered into the NBDB and at least one article written for an NBDB report. Field and analytical protocols documented in the final report, relevant scientific publications and on the web site Baseline data is fed into the NBDB, study sites geo referenced and protocols and indicators established for future monitoring.</p>	<p>Relevant government, NGO and other stakeholders maintain their support for the project.</p>

8. Integration of biodiversity issues into national policy is created.	Project proposals produced. Sustainability mechanism established through establishment of an agricultural biodiversity working group to promote biodiversity issues into future agriculture policy by year 4.	At least two project funding documents submitted. Agricultural biodiversity working group in place.	Relevant government, NGO and other stakeholders maintain their support for the project.
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Activities	Activity Milestones (Summary of Project Implementation Timetable) Note this project runs for 3.5 years
Project management	Yr 1: BTO project manager to establish project management systems and structure and formalising (through MOUs) the roles and responsibilities of each organisation. Establish Project Steering Committee, International PhD Supervisory Committee and project web site (2 months). Recruit NU/UWS project staff and external experts, PhD students and research assistants. First Steering Committee meeting (1 day September 2005), first meeting with government (1 day, February 2006) and local communities (September 2005). Establish regular liaison meetings between researchers, advocates, policy makers, national and local (district) governments and farmers in years 2 - 3.5. Set up information sharing mechanisms between Steering Committee members. Yrs 2 - 3.5 at least two steering committee meetings per year, one discussion forum with local communities and one meeting with government.
Research and monitoring	Yr 1: Establish study sites based on agricultural statistics and National Biodiversity Database. Trial and verify fieldwork methods. Undertake first year data collection on different taxa (birds, invertebrates, bats and agricultural land use. Input data and analyse to refine data collection methods. Yr 2: Refine and test methods in response to Yr 1 results as necessary. Undertake second full year of data collection. Input and analyse data. Feed results into strategy and documentation for providing advice to farmers, identifying best practices for biodiversity and novel management approaches. Yr 3: undertake third and final full year of data collection. Input data and start final analysis. Update provision of advice. Yr 3.5: complete analysis of full data set and write up results for publication. Synthesise results from all studies to identify best practice. Use results to fully update advocacy process. All data entered into National Biodiversity Database, identify indicator species and establish and document protocol for future monitoring system designed. Project proposal for continued monitoring produced.
Training	Yr 1 and 2: Supervisory training visits made by UK staff to Uganda to provide training in study design, field skills and data collection, for researchers (September 2005 November 2006). Yr 1, 2, 3 and 4: 2 training and supervisory visits per year made by BTO/RSPB/DIIS experts. Yr 2 and 3: training visits by key Ugandan research staff to UK. Research staff attend international scientific conference and two GIS training courses at Bournemouth University. Training in biodiversity assessment for NAADS advisors, agricultural service providers and NU/UWS staff. Yr 3 and 4 establish 2 demonstration plots and hold at least 3 open days. Yr 3.5: 2 PhD studies completed
Advocacy and PR	Yrs 1 - 3.5 Annual discussion forums to (a) assess needs and (b) deliver project outcome to extension service providers. Annual meetings with other stakeholders through Steering Committee meetings and discussions with Government. Yr 2 and 3 Production and distribution of advocacy materials including training manual for agricultural extension service providers, leaflets and posters for farmers and radio programmes to access a wider audience. Project proposals produced to ensure sustainability of integration of biodiversity issues into agricultural policy and practice (e.g. developing and expanding the use of participatory methods for biodiversity-friendly technology development amongst smallholders). Agricultural working group established to ensure biodiversity issues are integrated into new and existing relevant government plans and strategies

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

Project implementation timetable		
Date	Financial year	Key milestones
Project year 1 (10 months)		
June 2005	05/06	Project start date
August 2005	05/06	Project management system and Steering Committee established
August 2005	05/06	Project web site established
August 2005	05/06	New project staff recruited in Uganda (2 PhD students, 2 research assistants, 1 NU post holder and 1 UWS post holder)
September 2005	05/06	First project Steering Committee meeting
September 2005	05/06	Study sites identified in the banana-coffee arc
September 2005	05/06	First discussion forum held between NU/UWS and local farming communities
September 2005	05/06	Training visit by UK staff and experts external to MUIENR for PhDs, research assistants and NU/UWS staff in study design, field skills/techniques, sampling and survey protocol training.
February 2006	05/06	First three month season field season completed
February 2006	05/06	First discussions held between NU/UWS and key government staff, presentations made to PMA natural resource sub committee and framework/format for agricultural biodiversity working group discussed.
March 2006	05/06	Second project Steering Committee meeting
Project Year 2		
August 2006	06/07	Second three month field season completed and annual newsletter for farmers drafted by PhD students
August 2006	06/07	Agreement reached between NAADS advisors and NU/UWS on the most effective approaches for technology participatory development
September 2006	06/07	Second discussion forum held between NU/UWS and local farming communities
October 2006	06/07	First exchange visit of Ugandan staff to UK (to BTO, RSPB, and Bournemouth University)

November 2006	06/07	Third project Steering Committee meeting and training visit by UK staff and experts external to MUIENR for PhDs, research assistants and NU/UWS staff in field skills/techniques, sampling and survey protocol training.
February 2007	06/07	Third three month field season completed
February 2007	06/07	Drafts of training material (for NAADS coordinators and private extension service providers) and information leaflets (for smallholders) produced and trialled at training workshops for NAADS coordinators, service providers and NU/UWS staff
March 2007	06/07	Second round of discussions held between NU/UWS and key government staff, reporting on progress to date and confirming members of agricultural biodiversity working group
March 2007	06/07	Fourth project Steering Committee meeting
Project Year 3		
April 2007	07/08	Third discussion forum held between NU/UWS and local farming communities
August 2007	07/08	Fourth three month field season completed and annual newsletter for farmers drafted
September 2007	07/08	Demonstration farms novel land management approaches identified and plots established
September 2007	07/08	Second exchange visit of Ugandan staff (to present work at British Ecological Society autumn meeting)
October 2007	07/08	Fifth project Steering Committee meeting
February 2008	07/08	Fifth three month field season completed
March 2008	08/09	Training workshop in biodiversity assessment for NAADS advisors and agricultural extension service providers and NU/UWS staff, draft training manual presented & distributed for comment.
Project Year 4 (9 months)		
April 2008	08/09	Fourth discussion forum held between NU/UWS and local farming communities
May 2008	08/09	Sixth project Steering Committee meeting
July 2008	08/09	First meeting of agricultural biodiversity working group
August 2008	08/09	Project funding proposals prepared and submitted

August 2008	08/09	Sixth three month field season completed and annual newsletter for farmers drafted
October 2008	08/09	Open days to demonstration farms completed
October 2008	08/09	Seventh project Steering Committee meeting
December 2008	08/09	Project presentation to government, NGOs, other stakeholders and donors
December 2008	08/09	PhD theses submitted
December 2008	08/09	Final project report published

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.)
Training outputs		
Jun 2005 - December 2008	1A - PhD theses submitted 1B - PhDs attained	Two African researchers will be registered for PhDs at Makerere University. Theses will be submitted by the end of the project.
Jun 2005 - December 2008	5 – number of people to receive at least 1 year of training	Two research assistant to receive intensive training in each of the first three project years working closely with RSPB, BTO and MUIENR staff as well as other external experts in Uganda (e.g. DIIS) and the PhD students. Two NU/UWS staff to receive training: biodiversity assessment, participatory technology development and raising of public awareness.
April 2007 - March 2008	6A/6B - number of people to receive training and length of training	NAADS and NU/UWS and project staff to attend two 3-day training workshops relating to practical approaches to integrating biodiversity and agriculture.
June 2005 – December 2008	7 – types of training material to be produced.	Training manual relating to practical approaches to integrating biodiversity and agriculture produced for agriculture extension service providers and information leaflets and posters produced for smallholders.
Research outputs		
June 2005 – December 2008	8 – weeks spent by UK staff in host country	At least 12 months spent by UK project staff in Uganda
April 2008- December 2008	9 – number of documents produced for host country	Final report produced, disseminated to all stakeholders and made available on the project web site. At least three open days to demonstration farms in the final project year

June 2005 – December 2008	10 – number of guides/manuals produced	One training manual relating to practical approaches to integrating biodiversity and agriculture produced for agriculture extension service providers and information leaflets and posters produced for smallholders.
June 2005 – December 2008	11B – number of scientific papers to be submitted	At least four scientific papers submitted to peer reviewed journals
June 2005 – December 2008	12A – number of databases established	Database established as part of the National Biodiversity Databank (NBDB held at MUIENR) and made available on CD and via the project web site
June 2005 – December 2008	12B – number of databases enhanced	Taxonomic survey information will be added to National Biodiversity Databank
Dissemination outputs		
Feb 2006 – March 2008	14A – number of conferences/seminars to be organised	Two workshops to be held (to trial the training manual and information leaflets/posters). Final presentation to government, NGOs, other stakeholders and donors.
June 2005 – December 2008	14B - number of conferences/seminars to be attended	At least one presentation by each PhD student at a major international conference e.g. the British Ecological Society autumn meeting. Annual presentations to be made by PhD students at Makerere University and 2 nd year presentations to RSPB, BTO and Bournemouth University.
June 2005 – December 2008	15A/15B	At least three national press releases in Uganda in each project year
June 2005 – December 2008	15C	At least one national press release in the UK in each project year
June 2005 – December 2008	16A	Project information/findings to be disseminated as part of newsletters produced by NU, UWS, NAADS, Makerere as well as BTO News (circulation 13 000, 6 editions a year), RSPB Birds (circulation 617,514 4 editions a year) and Bournemouth University Annual newsletters to be produced by PhD students in each project year and distributed to all project stakeholders

June 2005 – December 2008	17A	Project web site established to disseminate information
June 2005 – December 2008	19A/B	At least two radio interviews/broadcasts for national and local radio stations each project year (coinciding with bi-annual Steering Committee meetings)
Physical outputs		
June 2005 – December 2008	20	At least £25, 000 worth of equipment and assets handed over to Uganda including computers, field equipment and a vehicle
June 2005 – December 2008	21	At least two demonstration farms established and funding sought to maintain and develop these beyond the lifetime of the project
June 2005 – December 2008	22	Study plots on at least 12 farms will be geo-referenced and data held at NBDB to ensure their availability for long term species and habitat monitoring. Field and analytical protocols established and documented for long term monitoring of birds and insects
Financial outputs		
June 2005 – December 2008	23	At least £58,000 will be contributed by the project partners either as in kind contributions or staff time.

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 progress of the project will be monitored through regular Steering Committee meetings, supervisory visits from the UK and exchange visits by Ugandan PhD students and project staff. It will be assessed in terms of achieving the outputs listed in question 23, which will be summarised in the bi-annual progress reports and Steering Committee minutes. Overall management and quality control will be the responsibility of the BTO in close collaboration of the NU/UWS project postholder, who will be responsible for day-to-day management of the project.

The Steering Committee will comprise senior representatives from RSPB, BTO and Bournemouth University, Makerere University, NU/UWS, NAADS, PMA, NEMA, DIIS, Industry (e.g. Eastern African Fine Coffee Association) and local community representatives. The Steering Committee will be kept apprised of developments by the project staff (channelled through the NU postholder) at regular meetings and via e-mail. The Steering Group will discuss progress against the following monitoring targets at its regular meetings.

Success of the scientific research included in the project will be monitored through the production of databases, peer review of scientific papers, reports, two PhD theses. Success of the training components of the project will be monitored through the production of training and supervisory reports, and the production of funding proposals and project reports by in-country partner staff.

The success of approaches to integrating biodiversity and agriculture will be assessed on demonstration farms. The training of agricultural extension service providers will include how to effectively measure the extent of uptake and adoption of these approaches by farmers. At the policy level it will be assessed by the establishment and effective operation of an agricultural biodiversity working group.

Advocacy and public relations activities will be monitored through a media releases file, establishment of a project website, and presentations made at conferences and workshops.