

**DARWIN INITIATIVE FOR THE SURVIVAL OF SPECIES:
APPLICATION FOR GRANT FOR ROUND 9 COMPETITION**

Please read the accompanying Guidance Note before completing this form. Give a full answer to each section; applications will be considered on the basis of information submitted on this form. Applicants are asked not to use the form supplied to cross refer to information in separate documents except where this is invited on the form. The space provided indicates the level of detail required but you may provide additional information on a separate sheet if necessary. Copies of this form are available on disk or by e-mail on request. You are asked also to complete the summary sheet attached at the end of this form. Although you may reproduce this sheet in a reasonable font, you should not expand it beyond an A4 sheet (leaving the allocated space for DETR comments to be made) as additional information will not be taken into account.

1. Name and address of organisation

THE NATURAL HISTORY MUSEUM, CROMWELL ROAD, LONDON SW7 5BD
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2. Principals in project

Details	Project leader	Other UK personnel (if working more than 50% on project)	Main project partner or coordinator in host country
Surname	Garwood		Valencia
Forename(s)	Nancy C.		Renato
Post held	Tropical Botanist, Researcher in Higher Plants		Principal Professor of Botany & Director, Herbario QCA
Institution (if different to the above)	NHM		Pontificia Universidad Católica del Ecuador (PUCE)
Department	Botany		Departamento de Ciencias Biológicas
Telephone			
Fax			
Email			

Please provide a one page CV for each of these named individuals.

3. Project title (not exceeding 10 words)

Biodiversity basics strengthening sustainability of the Yasuní Amazonian rainforest, Ecuador
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4. Abstract of study (in no more than 750 characters)

<p>Our purpose is to facilitate conservation and sustainable use of biodiversity within Ecuador's hyper-diverse Yasuní National Park (YNP) and Huaorani Ethnic Reserve (HER) and to increase the ability of the Huaorani people to participate in these activities. YNP-HER, a UN Man and the Biosphere (MAB) reserve, is the largest tract of protected forest in Ecuador (> 10⁶ ha). Our specific objectives are a) to produce much-needed biodiversity training tools in Huao-tededo and Spanish, including a guide to <i>Common Trees of Yasuní</i> and b) to provide practical training to the Huaorani and other Ecuadorians. This lasting legacy of experience, training, biodiversity tools, and institutional cooperation will enhance conservation and sustainable use of biodiversity, benefit the Huaorani and other Ecuadorians, and assist Ecuador in implementing the CBD.</p>

5. Timing. Give the proposed starting date and duration of the project.

July 2001-March 2004

6. Describe briefly the aims, activities and achievements of your organisation. (Please note that this should describe your unit, institute or department within a university.)

<p>Aims The Natural History Museum's mission is to maintain and develop its collections and use them to promote the discovery, understanding, responsible use and enjoyment of the natural world.</p>
<p>Activities The Science Departments of NHM undertake a wide range of biological and mineralogical research as well as managing and developing the extensive collections of specimens. The focus of scientific research in biodiversity centres around: investigations of how many species there are on Earth; how they are distributed through space and time; how they can be recognised and discriminated from each other; and what are their patterns of evolutionary relationship. Particular emphasis is being placed on producing practical tools for the recognition of key taxa such as indicator species, developing interactive methods for the assessment of conservation priorities and developing sampling protocols for the quantitative assessment of biological diversity. NHM staff are also actively involved in collaborative training programmes, helping to develop biosystematic resources and expertise in less developed countries.</p> <p>Structure (enclose chart if appropriate): Around 320 scientific personnel work in NHM, either as permanent staff members or externally funded, fixed-term, contract researchers. These scientists comprise the Museum's five research departments, Botany, Entomology, Mineralogy, Palaeontology and Zoology. The activities of these staff are focused in six research themes: Systematics and Evolution; Faunas and Floras; Environmental Quality; Biomedical Sciences; Earth Materials, History and Processes; Ecological Patterns and Processes; and a Museum-wide Curation Programme.</p>
<p>Achievements</p> <ul style="list-style-type: none">• The significance of the Museum's contribution to biodiversity research was recognised by the award of a 3-year extension to the European Union Large-Scale Facility grant (value of extension 1,050,000 EURO). This increases access for researchers to biodiversity resources within NHM's systematics collections through short-term visits and provision of training.• NHM staff undertook fieldwork in collaboration with local institutions in 66 countries around the globe last year.• In total the Museum generated over £ 3.2 million in non-exchequer earnings for scientific research and curation during 99/00. Grants awarded to NHM staff include: (Locating long-term fern refugia – NERC; Capacity Building in Non-Coraline Marine Habitats, Ranong – EU DG1B Project; The Influence of Land-Use Management Practices on Species and Functional Biodiversity of Nitrate Oxidising Bacteria and Nitrification and Denitrification Processes - NERC; Patterns of termite diversity and ecosystem function – Leverhulme Trust; Trees of the Mayan area – AVINA; and Molecular diversity and evolution of microsporidia parasites – Wellcome Trust)• Over 450 peer-reviewed scientific publications were produced in the last 12 months.• A 100% pass rate was achieved by the students participating in the MSc in Advanced Methods in Taxonomy and Biodiversity (joint NHM and Imperial College course). NERC have committed to supporting future studentships for this course.• Over 80 post-graduates students are currently being co-supervised by NHM staff and are working towards PhDs. NHM was awarded its own studentship quota by some of the Research Councils in recognition of the quality of training offered by NHM.

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

<p>NHM has had a project funded every year since the beginning of the Darwin Initiative, with a total number of NHM lead projects totalling 16.</p>

8. Which overseas institutions, if any, will be involved in the project? Please explain the responsibilities of these institutions.

<p>Pontificia Universidad Católica del Ecuador (PUCE), Departamento de Ciencias Biológicas:</p> <ul style="list-style-type: none">• Herbario (Director: Dr. Valencia): Local financial management; space for plant identification & production of guides; selection, supervision and training of project coordinator and field and student trainees• ECYasuní (Director: Dr. Koester): Space for field-related activities, workshops, housing; purchase and maintenance of vehicles for transport with YNP-HER; selection, coordination and training of Huaorani trainees; <p>Local Huaorani communities: especially those near ECYasuní such as Dicarón, Guiyero, and Bameno: Selection of Huaorani trainees, discussion of current and future biodiversity needs</p> <p>Repsol-YPF (commercial partner): Regular logistic support to ECYasuní and Huaorani communities, such as emergency medical facilities and maintenance of 100 km road through YNP-HER. Note: buildings which now house ECYasuní were the original oil company headquarters, later donated to PUCE to foster conservation and study of biodiversity.</p>

PROJECT DETAILS

9. Define the purpose (main objective) of the project in line with the logical framework.

Facilitate conservation & sustainable use of biodiversity within Ecuador's hyper-diverse Yasuní National Park (YNP) & Huaorani Ethnic Reserve (HER) & increase the ability of the Huaorani people to participate in these activities. YNP-HER, a MAB reserve in Ecuador's Amazonian Region, is the largest tract of protected forest in Ecuador (> 10⁶ ha). Yet, biodiversity training tools such as identification guides are lacking for YNP-HER. Although protected, it was opened to oil development about 10 years ago. Lessons learned from environmentally and socially disastrous development north of the Napo River since the early sixties, and pressure from international and local indigenous groups, has seen the adoption of environmentally less damaging practices, such as burying pipelines and limiting colonisation. This has not prevented the Huaorani people, once the fierce and independent sole occupants of this vast region, from suffering enormous cultural upheaval. To preserve their cultural heritage and increase their economic well-being, the Huaorani seek to be recognised as guardians of their traditional territory and to establish community-based ecotourism. This is not yet feasible because, although superb naturalists, most Huaorani lack the experience and skills to communicate effectively with government officials, NGO staff, local scientists and ecotourists to accomplish these goals. Our specific objectives are a) to produce much-needed biodiversity training tools in Huaorani and Spanish and b) to provide practical training to the Huaorani and other Ecuadorians. This lasting legacy of experience, training, biodiversity tools, and institutional co-operation will enhance conservation and sustainable use of biodiversity, benefit the Huaorani and other Ecuadorians, and assist Ecuador in implementing the CBD (especially Articles 1, 7, 8, 10, and 12).

10. Is this a new project or the continuation of an existing one?

This is a new project, with discrete objectives, building on existing collaborations between NHM and PUCE.

11. What is the evidence for a demand or need for the work? How is the project related to conservation priorities in the host country(ies)? How would the project assist the host country with its obligations under the Biodiversity Convention?

How was the work identified?: Dr. Garwood (NHM) is collaborating with Dr. Valencia (PUCE) on an ecological project, funded by NERC and the Mellon Foundation, at PUCE's Estación Científica Yasuní (ECYasuní). ECYasuní has developed strong links with both local Huaorani communities and Repsol-YPF (the oil company working in the region). The Huaorani have identified official guardianship of the Yasuní region and community-based ecotourism as their preferred ways to conserve their traditional territories, maintain their culture and improve their well-being. ECYasuní is well placed to assist the Huaorani achieve these objectives. Further discussions have identified how we can best use the Darwin Initiative to further conservation and sustainable development in the region and to assist the Huaorani with their goals.

How is the project related to conservation priorities in the host country? The National Strategy for Biodiversity and Country Action (ENBPA) for Ecuador is currently under development (funded by GEF). Our project supports the objectives of the ENBPA: 1) adopt measures for the protection of ecosystems, species and genetic resources to save remaining biodiversity; impede degradation of natural and modified ecosystems; assure adequate management, protection and restoration; and implement mechanisms of conservation; 2) evaluate and study the biological resources of the country and the factors that lead to their deterioration and loss; 3) promote sustainable and fair use of biodiversity; and 4) improve the quality of life of Ecuadorians, now and in future generations, through sustainable use and preservation of natural resources (INEFAN, 1998). Information for the ENBPA will be compiled for four geographic regions, one of which is the Amazonian Region (INEFAN, 1998). As the largest protected area in the Amazonian Region, conservation and sustainable use in YNP-HER will remain a matter of concern.

How will the project assist the host country meet its obligations under the Biodiversity Convention? This project will **assist** Ecuador, **a country rich in biodiversity but poor in resources**, in the conservation and sustainable use of biodiversity in YNP-HER while helping **alleviate poverty** among the Huaorani by encouraging both traditional use and innovation (Art. 1, 8, 10). It contributes through all **five DI project areas**, all dependent on **British expertise in collaboration** with Ecuadorian institutions and communities. **Research** (Art. 7, 12): Identification guides (see part 13) will improve the information base on Yasuní species, forming the basis for future training in conservation and implementing management plans for YNP-HER and the Yasuní 50 Forest Dynamics Plot, which will monitor long-term changes in plant biodiversity. **Training** (Art. 12): The project will provide direct in-service training by UK experts at several levels and opportunities for those trained to train others during the project (see part 15). It will promote long-term development of training capacity through production of identification guides, training and educational material, and trainers. **Institutional capacity building** (Art. 18): The project will strengthen PUCE and Huaorani communities and promote co-operation of these with Repsol-YPF and NHM. **Work to implement CBD:** The project will provide a good-practice example of using production of biodiversity guides to transfer technology (Art. 16), emphasising the bi-directional movement of modern knowledge to and traditional knowledge from the indigenous Huaorani for mutual benefit in biodiversity conservation and sustainable use (Art. 17). **Environmental awareness** (Art. 13): Presentations and publications will disseminate results to local Huaorani communities, oil company personnel, and the Ecuadorian public. Teaching materials for Huaorani primary and secondary schools will educate non-Huaorani teachers in traditional and modern biodiversity concepts.

12. In what ways can this project be considered a Darwin project? How does the project relate to the Darwin principles? How would the project be advertised as a Darwin project and in what ways would the Darwin name and logo be used?

An integrated programme will fulfil our main purpose and specific objectives (see part 9), making an immediate **impact** and acting as a long-term **catalyst** for conservation and sustainable use of biodiversity within YNP-HER. Activities will focus around producing plant identification guides, including *Common Trees of Yasuní* and concise guides to fruits, flowers, and seedlings (see part 13 for further description): these will immediately contribute to training, research, and management plans. **Training** in guide production will boost local capacity for producing future guides covering more species. Collecting new biodiversity information will be the central **training** activity linking all participants. Teams will include Ecuadorian trainees (students & graduates from PUCE), young bilingual Huaorani, and their monolingual but more knowledgeable elders. This will promote two **distinctive** and **innovative** aspects of the project. First, they will facilitate the bidirectional flow of modern biodiversity concepts and working habits to all Huaorani trainees and of traditional knowledge to younger Huaorani and Ecuadorian trainees. Second, we will focus on understanding the broader biodiversity concepts of the Huaorani to use as the basis for discussing modern concepts, as well as learning Huaorani names and uses of plant species. (Are there traditional equivalents for 'modern' concepts, e.g. pollination syndromes, forest regeneration, habitat specialisation, and ant-plant mutualisms?) Guides will include both traditional and modern knowledge and be published in Huao-tededo, Spanish, and English. This will provide a permanent record of Huao traditional knowledge in their own language and an introduction to modern concepts; **training tools** for local biodiversity technicians and professionals; and guides for international and local ecotourists, thus linking potential Huaorani guides to ecotourists. Information collected for the guides will be reworked into educational materials appropriate for Huaorani and Ecuadorian schools, particularly targeted at bridging the biodiversity gap between Huaorani school children and their non-Huaorani teachers. Work with the first Huaorani teams will identify what types of **training materials** are needed to facilitate training later teams. The project relies on the **quality** and **scientific excellence** of the main project scientific partners, including NHM's proven track record in biodiversity guides, education, and training, PUCE's excellent facilities (QCA, ECYasuní), expertise in Amazonian flora, and quality students.

Darwin funding will promote **additional** biodiversity work that falls outside the remit of conventional sources. The project shows **value for money** by providing a range of high **quality** outputs (see part 13) and training benefits (see part 15) which will have significant **impact** throughout the Amazonian Region, not just in YNP-HER; by concentrating training and other activities in Ecuador rather than the UK; and by having a high in-kind contribution from staff and facilities at PUCE and NHM. The proposal has already been successful in **leveraging support** in the form of photographic images. NHM is seeking additional support from Repsol-YPF for expanded print runs/the production of guides. Part of the **exit strategy** (part 17) will prioritise future biodiversity work in YNP-HER, and to use our results as a **catalyst** to **lever additional funding** for future work.

The project will be advertised by the NHM's press office, internet web site, and project leader in the UK and internationally and by the British Embassy, British Council, our partners and Darwin Fellows and Students in Ecuador, emphasising how the project supports the Darwin Initiative's principles and main objectives. All publications and presentations will acknowledge Darwin support and display the Darwin logo, which will be used on T-shirts for all participants to advertise the project locally.

13. Set out the proposed timetable for the work, including the programme's measurable outputs using the attached list of output measures.

Work Programme [Outputs Measures]:

General Activities:

- Establish project protocols with host partner & Darwin Fellow/Project Co-ordinator (DF) in UK; distribute press release [15C - 1]. *July 2001*
- International workshop at ECYasuní, Ecuador [14A - 1] to launch project, discuss target species, exchange data (particularly photos of Yasuní species), strengthen links between partner institutions; distribute press release [15A - 1]. *September 2001*
- Training of DF, student, field and Huaorani trainees at ECYasuní by NHM project leader. *September 2001**, *December 2001***, *May 2002***, *November 2002**, *March 2003***, *June 2003**. (*, 5 weeks; **, 1 week full-time, 3 weeks part-time) [8 - 18 weeks full-time, 9 weeks part-time]
- Training of DF, student, field and Huaorani trainees at ECYasuní or PUCE (Quito) by UK Design Consultant. *December 2001*, *November 2002*, *June 2003* [8 - 9 weeks]
- Local workshops at ECYasuní [14A - 3]: training of DF, student, field, and Huaorani trainees by NHM & PUCE staff, discussing effectiveness of training, identifying training materials needed, identifying gaps in information; enhancing cooperation with social and environmental staff of Repsol-YPF and educating oil-production staff about local biodiversity and sustainability issues. *December 2001*, *May 2002*, *November 2002*
- Submit interim reports. *March 2002*, *March 2003*
- Complete educational and training materials [7 - 2] in Spanish. *by August 2003*
- Hand specimens to QCA, QN, & ECYasuní [13B - 3], collection databases to QCA & ECYasuní [12B - 2]. *by August 2003*
- Complete educational and training materials in Huao-tededo [7 - 2]. *by January 2004*
- Final Workshop at ECYasuní [14A - 1] to publicise completion of project, launch and begin distribution of publications, evaluate success of project, and discuss future priorities; distribute press releases [15A - 1; 15C - 1]. *February 2004*
- Summarise additional financial contributions received [23 - estimated £54,914 see part 22 & 23 for actual figures]; hand physical assets to PUCE [20 - £8,333]; submit final report. *by March 2004*.

Activities for *Common Trees of Yasuní*: Training Outputs: DF [5-1, 26 months, including 3 months in UK]; field technical trainee [6A-1, 6B – 12 months]; Huaorani trainees [6A – minimum of 12, 6B – minimum total of 360 person days (12 person-months)].

- Train DF in guide production and project management in UK. *July 2001, April 2002, April 2003*
- Language training for DF in Huao-tededo. *August 2001 (2 weeks)*
- Joint fieldwork and training of DF, field and Huaorani trainees (15 days/month); preparation of first draft of *Common Trees* and educational and training materials by DF (5 days/month). *August 2001-December 2001*
- Preparation of final draft (15 days/month), verification of information at Yasuní (if necessary) and supervision of student/Huaorani trainees (5 days/month). *February 2002-August 2003*
- Completion of *Common Trees*, Spanish edition [10-1] by August 2003; English and Huao editions [10-2]. by January 2004.

Activities for other guides: 3 groups of trainees: *September 2001-April 2002, February 2002-January 2003, September 2002-April 2003*. Student trainees [4A - 6, 4B –12 months each]; Huaorani trainees [6A – minimum 12, 6B – total 360 person-days]
Months 1-4, Joint fieldwork, training, collection of biodiversity information; local workshop
Months 5-10 Draft versions of guides and educational materials produced and tested; presentations in Yasuní (14 A - 6)
Months 11-12 Completion of guides [10-3] and Licenciatura project; presentations in Quito (14 A – 6)

Description of Guides:

Common Trees of Yasuní will include descriptions and illustrations of 200 tree species of the Yasuní region, with information from western and Huaorani sources. We will target the 150 most common species: of 1400 species found in permanent plots in the region, these 150 species include 63% of all stems (N. Pitman, pers. com), hence are the most likely to be encountered in further inventorying and monitoring and should receive priority for training. To be published as separate editions in Huao-tededo, Spanish, and English (to improve delivery to a wide range of stakeholders), with identical text and photos, and common names in all three languages as well as Quechua (language of the largest indigenous group in Amazonian Ecuador).

Other guides will consist of colour images with scientific names and common names in Spanish, Huao, and Quechua. We plan at least three guides. Flower and fruit guides will have about 20 species per page, and include about 200 species not included in *Common Trees*. The seedling guide will focus on species in *Common Trees of Yasuní*.

Educational materials for Huaorani schools: These will focus on biodiversity concepts, using Yasuní species as examples.

14. Do you know of any other individual/organisation carrying out similar work? Give the details of the work, explaining the similarities and differences.

No ongoing work focuses on the biodiversity needs of YNP-HER and the Huaorani people. There are no published plant identification guides for the Yasuní region or Ecuadorian Amazon, although species lists (some annotated) and databases have been compiled at PUCE and some ethnobotany published. Provision of guides for inventory and monitoring work is essential to fulfil CBD commitments. Researchers have taken photographs with the long-term goal of publishing guides (should funds become available) and are eager to contribute their images at no cost to this project. For Ecuador, there are guides to mammals*, birds[†], palms, and *Inga*; a catalogue* of plant species; and books on endemic plants*[†], as well as regional guides to plant genera and timber trees* of NW South America (*, in Spanish; [†], in press). We can confirm that no-one is working with the Huaorani on biodiversity concepts, training and education, or plant identification guides.

15. Will the project include training and development? Please indicate how many trainees will be involved, from which countries and what will be the criteria for selection. How will you measure the effectiveness of the training and will those trained then be able to train others? Where appropriate give the length of any training course.

Yes. There will be extensive in-service training of Ecuadorians and indigenous Huaorani in Ecuador (or UK where indicated). Ability and opportunity to train others during and after the project is completed will be key selection criteria for all participants.

***Darwin Fellow/Project Co-ordinator (DF, 1):** Selection criteria: expert knowledge of Yasuní flora, management experience, BSc or MSc. Training received: *Identification guide preparation & project management by NHM staff in UK and Ecuador, Huao-tededo by language by specialist, traditional knowledge by HT.* Training others: DF will train ST in guide preparation, FT & ST in tree identification and basics of Huao language, and HT in modern biodiversity concepts, and others post-project.

Field technical trainee (FT, 1): Selection criteria: technical experience in Yasuní. Training received: *tree identification by DF, traditional knowledge by HT, basics of Huao language by DF; working with Huaorani people by DF & PUCE & NHM staff.* Training others: FT will train ST & HT in plant collecting and scientific field work, and others post-project.

Darwin Student trainees (ST, 6): Selection criteria: academic record, interest, experience. Training received: *production of guides & educational materials by DF and PUCE & NHM staff; working with Huaorani people by DF & PUCE staff; traditional knowledge by HT, plant identification by DF & FT.* Training others: ST will train HT and teachers at Huaorani schools in modern biodiversity concepts, and others post-project.

Huaorani trainees (HT, minimum of 24): Selection criteria: mixture of younger bilingual individuals & elders with more traditional knowledge, desire to participate, representation from several villages. Training received: *Modern biodiversity concepts by DF and ST, modern working practices by DF, FT, & ST, biodiversity interests of ecotourists & scientists by DF & ST.* Training others: HT will train DF, FT, & ST in traditional knowledge, and other Huaorani in modern knowledge & practice.

Measuring effectiveness of training: supervision by NHM & PUCE staff, reports, workshops, quality of guides and educational materials produced, questionnaires for trainees.

*Note: The Darwin Fellow (DF) /Project Co-ordinator is a pivotal position for the project's scientific base, as well as daily management, supervision and training in the field. The DF must identify trees in sterile condition, as this is the critical link between traditional knowledge and modern scientific names, and train others in identification. Suitable individuals have been identified: a particularly strong candidate (who has expressed keen interest to work on the project) has verified identification of over 200,000 trees in more than 1100 species in the Yasuní Forest Dynamics Plot, and has supervised the mapping and identification team.

16. How will trainee outcomes/destinations be monitored after the end of the training?

Monitoring during project: Preliminary questionnaires will assess specific training needs. Immediate benefits gained, long-term benefits expected, and effectiveness of training will be evaluated by questionnaires to trainees and assessments of trainers during and at the end of the training period. Trainees will be invited to the final workshop to discuss the success of their training, and whether their initial evaluations have changed. For student trainees, successful submission of their Licenciatura will in part measure success.

Post-project monitoring: NHM project leader and Ecuadorian partner will receive information of the following successes. Darwin Fellow: further participation in biodiversity activities, especially advanced employment, initiation of further flora work, entry into and/or scholarship abroad for PhD. Darwin Students: employment in the biodiversity sector, entry into MSc or PhD programmes. Huaorani trainees: increased employment in biodiversity projects in YNP-HER, acceptance into Ecuadorian certification programmes for eco-tourism guides.

17. How is the work of the project expected to continue after the end of grant period? A clear exit strategy must be included.

The guides, educational materials and training guidelines will be produced, and training completed, within the specified period of the project. These will provide an immediate impact on and a lasting legacy for developing conservation and sustainable use of biodiversity in YNP-HER. They will promote future scientific research in Yasuní, such as further inventory work, monitoring changes in biodiversity, and studying the food habitats of animals, by providing trained personnel, training materials, and trainers. This will also enable management plans to be developed and carried out for the YNP – HER region and long-term monitoring of permanent plots which have already been established.

All text and images used in the guides and educational materials will be transferred to PUCE on CD, to encourage additional print runs, new editions, and translation into other indigenous languages (especially Quechua). These could also form the basis for a more complete illustrated flora of Yasuní. Project reports and recommendations will be distributed to government bodies and NGOs to facilitate up-take of results.

During the final Workshop, we will discuss priorities for further biodiversity work within YNP-HER, make recommendations for suitable projects, and identify likely funding mechanisms to carry these out. Possibilities for continuing and strengthening current collaborations and adding new partners will be discussed. Further training needs of participating individuals will be identified.

MONITORING AND EVALUATION

18. Describe how progress on the project would be monitored and evaluated in terms of achieving its aims and objectives, both during the lifetime of the project and at its conclusion. How would you ensure that it achieves value for money? What arrangements will be made for disseminating results? If applicable, how would you seek the views of clients/customers?

The projects will be monitored at intervals via:

- i) supervision by NHM project leader during visits to Ecuador (2-3 visits per year, each at least 1-month long)
- ii) supervision of DF by NHM staff during visits to NHM (1 visit per year, 1-month long)
- iii) NHM's internal project assessment system (linked to staff reporting and forward job planning)
- iv) the project's built-in progress review meetings & the Darwin Initiative's own reporting procedures
- v) local workshops, to discuss results and assess benefits of programme to Huaorani goals
- vi) final international workshops, to evaluate programme and make recommendations

and continuously in Ecuador by:

- vii) supervision of DF & student trainees by main partner at PUCE & through email contact with NHM project leader
- viii) supervision of student, field and Huaorani trainees by DF.

All expenditure will be controlled by the NHM project leader, subject to NHM's financial control procedures and Darwin guidelines, and monitored by the Botany Departmental Administrator. Financial transactions in Ecuador will be controlled by the DF under approval of the main partner at PUCE, and aided by a part-time financial assistant.

Oral or poster presentations at national and international meetings will disseminate results and elicit evaluation of work. Identification guides and educational and training materials will be sent for review before publication. These publications and project reports will be disseminated to appropriate stakeholders within Ecuador toward the end of the project.

19. Logical framework. Please enter the details of your project onto the matrix using the note at Annex B of the Guidance Note.

	Project summary	Measurable indicators	Means of verification	Important assumptions
Goal	Darwin Initiative Main Objective: To assist countries rich in biodiversity but poor in resources with the conservation of biological diversity and implementation of the Biodiversity Convention	Countries assisted by DI projects to conserve biodiversity and implement CBD	DI annual reports Press cuttings	DETR funding for DI continues
Purpose	Facilitate conservation & sustainable use of biodiversity within Ecuador's hyper-diverse Yasuni National Park (YNP) & Huaorani Ethnic Reserve (HER) & increase ability of Huaorani to participate in these activities by a) producing training tools and b) providing practical training	Training tools produced Ecuadorian and Huaorani personnel trained Conservation & sustainable use in YNP-HER promoted by uptake of training tools & trainees	-Government and NGO reports on conservation and sustainable development in Ecuador -Correspondence from former trainees indicating employment or training in biodiversity area in YNP-HER	-Ecuador maintains commitment to CBD and protected areas -International/national funding available for uptake of products -Government and NGO reports on biodiversity produced and available
Outputs	1) Huaorani trained locally in modern biodiversity concepts & working practices 2) Ecuadorians trained locally in traditional biodiversity concepts & knowledge, production of guides & educational material 3) Ecuadorian trained in UK on production of guides and project management 4) Multilingual identification guides produced for monitoring biodiversity, training, and community-based ecotourism 5) Multilingual biodiversity educational materials produced for Huaorani schools to link non-Huaorani teachers & concepts to traditional knowledge 6) Links among Huaorani, PUCE, Repsol-YPF & NHM strengthened and focussed on biodiversity issues	1) Huaorani receive 720 person-days in-service training & participate in workshops, 2001-2003, 2) Ecuadorians receive 107 person-months in-service local training & participate in workshops, 2001-2004, 3) Ecuadorian receives 3 months in-service training in UK, 2001-2003 4) Guides published in Spanish by August 2003, published in English & Huao by January 2004 5) Educational materials produced in Spanish by August 2003, produced in Huao by January 2004 6) Joint PUCE, NHM, Repsol-YPF and Huaorani biodiversity activities increased, in-kind or other financial contributions directed toward biodiversity objectives	1-3) Interim and final project reports 4-5) Guides and educational materials disseminated on schedule 6) Annual reports of Repsol-YPF, PUCE, and NHM 6) Oral reports from Huaorani community meetings	1-3) Huaorani and Ecuadorian trainees learn techniques and cooperate with each other 4-5) Spanish to Huao translator(s) interested in project and willing to participate 6) PUCE & Repsol-YPF continue to support biodiversity work in YNP-HER 1, 6) Huaorani remain interested and committed to project opportunities
Activities	i) Small teams of Huaorani and Ecuadorians collect and exchange biodiversity concepts and knowledge in field, training each other (outputs 1-4) ii) International & local workshops (outputs 1-6) iii) Research and writing of identification guides and educational materials (outputs 3-4) iv) Train Ecuadorians in production of guides (outputs 2, 4) v) Presentations and workshops attended by staff and trainees from all institutions (outputs 1-2, 6).	<u>Budget:</u> Salaries £104,995 Equipment £8,333 Travel £40,278 Miscellaneous £13,000 Overheads and rents £28,229 <u>Workshops</u> £7,306 TOTAL of spend £202,141 <u>Income to be deducted</u> £55,630 Amount requested from Darwin £147,227	Interim and final project reports PUCE & NHM accounting procedures	i, iii, iv) Suitable Huaorani and Ecuadorian trainees can be recruited to project; trainees continue with project and keep to schedule ii) International workshops attract international interest i, ii) Relationships among PUCE, Repsol-YPF and Huaorani remain strong; criminal or guerrilla activity does not escalate in Yasuní region v) suitable venues and audiences for presentations identified and addressed