



Darwin Initiative for the Survival of Species

Final Report

***Community based conservation of Hoang Lien
Mountain Ecosystem, Vietnam***

162/10/011



Contents

1. Darwin Project Information	1
2. Project Background/Rationale	1
3. Project Summary	3
5. Project Impacts	6
6. Project Outputs	8
7. Project Expenditure	8
8. Project Operation and Partnerships	9
9. Monitoring and Evaluation, Lesson learning	10
10. Darwin Identity:	11
11. Leverage	11
12. Sustainability and Legacy	12
13. Post-Project Follow up Activities (<i>max. 300 words</i>)	12
14. Value for money	13
Author(s) / Date:	13
15. Appendix I: Project Contribution to Articles under the Convention on Biological Diversity (CBD)	14
16. Appendix II Outputs	16
16. Appendix II Outputs	16
17. Appendix III: Publications	18
18. Appendix IV: Darwin Contacts	20
19. Appendix V: Logical Framework	21

(Separate)

Appendix VI: Technical Report

Appendix VII: Other Project Reports

Darwin Initiative for the Survival of Species

Final Report

1. Darwin Project Information

Project title	Community based conservation of Hoang Lien Mountain Ecosystem, Vietnam
Country	Vietnam
Contractor	Fauna & Flora International
Project Reference No.	162/10/011
Grant Value	£89,290
Starting/Finishing dates	July 2001 – April 2003 (extended to December 2003)

2. Project Background/Rationale

The Hoang Lien Mountains lie in the provinces of Lao Cai, Yen Bai, Lai Chau and Son La in northwest Vietnam. They are one of the most biologically and ethnically diverse landscapes in Vietnam and the wider Indochinese region – a global centre of plant diversity. A recent history of human population expansion and economic development has fragmented the natural forest cover of the mountain range, and hunting by rural communities has reduced large mammal populations to near or actual extinction. However, the remaining forests of the Hoang Lien still support some the richest assemblages of plants and animals known in Vietnam.

These mountains are also the home to over 30 different ethnic minority groups, many of which are poor and heavily dependant upon forest resources for their livelihoods. As a result of a rapid rural population growth and the development of urban economies since the late 1970s, the pressure on the natural resources of these mountains has increased dramatically. Positive action must be taken now to protect the diminishing wildlife populations and dwindling forest fragments. Without such intervention the fragile integrity of the Hoang Lien Mountains ecosystem will be irrevocably lost. Such environmental degradation will not only compromise the biological, cultural and direct economic values of the Hoang Lien, but will also degrade the crucial ecosystem services that the range's forests provide. Most notable of these being catchment protection for the two largest drainage systems in the north of the country: the Red and Black rivers, water sources upon which millions of rural and urban people's livelihoods depend.

The Hoang Lien Mountain Range with an altitudinal range from 300 to 3,143 meters lies at the junction of two biogeographic realms (Palearctic and Indomalayan), and three biomes (tropical dry forests/woodlands, tropical humid forests, and sub-tropical/temperate rainforest/woodlands). The montane flora of the Hoang Lien Mountains therefore contains a unique assemblage of species representing these different biogeographic realms and biomes. Nguyen Nghia Thin (1998), estimates that this mountain range is home to 25% of Vietnam's endemic plant species. In

addition to endemic species, many threatened and relict species survive in the Hoang Lien Mountains. While mammal diversity and distribution is relatively low as a result of intensive hunting pressure the Hoang Lien Mountains are rich in other animal groups, 347 bird species have been recorded, including 49 that are restricted in Vietnam to northwestern Tonkin. One third of Vietnam's known amphibian species, including a number of new species that were only recently described, are known from the area. The large forest in Van Ban district harbours the second largest known population of the Western black crested gibbon *Nomascus concolor* in Vietnam.

Van Ban District in Lao Cai Province has a large area of forest. Unfortunately current lack of focused management is leading to a range of unsustainable uses. There is a significant trade (legal and illegal) in rare and endemic plants-including *Fokienia* and orchids. Hunting and trapping of large animals is uncontrolled. Agricultural and forest plantation encroachment has already led to population declines and local extinctions. The project set out to address the problems of unsustainable use and biodiversity loss through biodiversity survey and priority setting, protected area planning and involvement of local communities in biodiversity management.

FFI and its partner organisation Forest Protection Department (Ministry of Agriculture and Rural Development at National and Provincial level), identified the project area as a priority site for the conservation of endemic plants and primates. The need for the conservation of rare and endangered plants was identified by concerned Vietnamese botanists from the University of Hanoi. This is due to the increasing trade in plants for medicinal properties and ornamental uses and forest conversion, leading to a rapid decline of populations and species extinction. They also expressed a need for capacity building and training in botanical inventory and systematic identification of priority sites for plant conservation. FFI has identified the northern Indochinese limestone forests and tropical montane forests (Hoang Lien Mountain Range), as the two the most threatened ecosystems in Vietnam and immediate priority areas for plant conservation in Vietnam and Indochina. FFI, FPD and the University of Hanoi agreed to jointly develop a project for the conservation of rare and endemic plants in northern Vietnam and the Royal Botanic Gardens Kew agreed to cooperate. Moreover, FFI and FPD identified the area as a priority site for the critically endangered black crested gibbon (Vietnam Primate Conservation Status Review 2000). As all partners recognised the limitation of the protected area approach to conserve plants and their habitats in Vietnam, it was logical to develop an approach that supports local communities in the protection and sustainable use of rare and endangered species. The selection for the project area is based on the National Biodiversity Action Plan (BAP), listing the site as one of the highest priority for conservation in Vietnam (GOV 1996). The area is considered as a Centre of Global Plant Diversity {CPD EA67} (WWF & IUCN, 1995). A three-year-review workshop conducted a gap analysis of the implementation of the BAP, highlighting the fact that no conservation interventions have been undertaken to protect the Hoang Lien Mountain Range (IUCN, 1998). Only 20% of the forested mountain range is currently under protection, excluding the important limestone forests in Van Ban district. Due to faulty boundary alignment in the past, only half of the existing Hoang Lien Nature Reserve is forested and the current management is lacking the capacity and support of local people to reduce the threats.

At the provincial level, a protected area in Van Ban has also featured in both the assessment (SPAM, 2002) of, and subsequent management strategy (Lao Cai PPC, 2003) for, special-use forests in Lao Cai Province.

Recent consultations in Vietnam in relation to the Critical Ecosystem Partnership Fund¹ have included the Hoang Lien Son Ecosystem as a ‘Critical Terrestrial Priority Area’ within the ‘Indo-Burma hotspot’. As such the Hoang Lien Son landscape is the priority for conservation in Northern Vietnam.

3. Project Summary

Purpose

Community-based conservation of Hoang Lien Mountains.

Outputs

1. Priority sites for plant and primate conservation identified. Threat analyses for endangered species & habitats (e.g. trade study).
2. Village conservation stewardship agreements in place (e.g. improvement of forest protection contracts and local forest protection regulations)
3. Increased awareness for plant and primate conservation
4. Propagation of endangered plants and /or development of more sustainable systems of NTFP extraction
5. Improved community participation in protected area management and law enforcement
6. Gazettement of new protected area in Van Ban district (or expansion of existing Hoang Lien reserve)

The Logical Framework is included as Appendix 5.

Two changes were made to the objectives of this project during the first year of operation and reported to Darwin in the first annual report:

- 1 The propagation of endangered plants and/or development of more sustainable systems of NTFP extraction output was refocused to concentrate on a single, major NTFP, cardamom, as the scale and production of this product has been increasing rapidly in the last two years.
- 2 One output (6) of the project has been revised. The biological and social complexity highlighted in the initial studies have meant a refocus to collecting the base line information necessary, and investigating the possibilities, for the most suitable long-term management strategy for the protection of the Van Ban forests.

Within the Darwin project the focus was therefore on preparatory work for the conservation interventions, consisting largely of information (biological & socioeconomic) gathering and analyzing, which is a prerequisite for the development of sound conservation interventions implemented by follow-on funding secured from the EC.

¹ The Critical Ecosystem Partnership Fund (CEPF) is a joint initiative of Conservation International, The Global Environment Facility, the Government of Japan, the John D. and Catherine T. MacArthur Foundation and the World Bank. www.cepf.net

The Articles under the Convention on Biological Diversity (CBD) which best describe the project are:

- 13. Public Education and Awareness;
- 7. Identification and Monitoring;
- 10. Sustainable Use of Components of Biological Diversity;
- 12. Research and Training.

Please see Appendix 1 for further details and the additional Articles which the project contributes towards.

The project has assisted the Vietnam government to meet its Biodiversity Action Plan objectives, and hence its obligations under the Biodiversity Convention, in the following ways:

- Identifying priority sites for the conservation of rare & endemic plants and primates (Section 3.1. 'Setting priorities for protected areas', *Biodiversity Action Plan for Vietnam*);
- Development of village conservation stewardship agreements (Section 4.10. 'Socio-economic aspects of biodiversity conservation', *Biodiversity Action Plan for Vietnam*);
- Development of systems of sustainable management of non-timber forest products or ex-situ propagation of endangered plants (Section 4.8. 'Need for ex-situ conservation', *Biodiversity Action Plan for Vietnam*);
- Increasing awareness for the protection of endangered plants and primates (Section 4.9. 'Education & Awareness Programs', *Biodiversity Action Plan for Vietnam*);
- Improving protected area management with participation of local communities (Section 3.3. 'Strengthening the management of Nature reserves and National Parks', *Biodiversity Action Plan for Vietnam*);
- Expanding the current protected area system and reviewing current boundary alignments (Section 3.2 'Revision of the protected area system', *Biodiversity Action Plan for Vietnam*);
- Participatory law enforcement (Section 2.2. 'Strengthening law enforcement', *Biodiversity Action Plan for Vietnam*).

The project has been partially successful in meeting its objectives. The project has been successful in achieving the first years objectives – primarily the background research etc. Due to a combination of delays beyond the control of the project (reported in the Annual Reports 1 & 2), and as noted (in Annual Report review) the over ambitious goals of the project linked to the complexity of the site and an original underestimation of the conservation value, one of the key outputs i.e. the achievement of the gazettelement of the area was not achieved. Output no 6 was refocused to assess the opportunities and constraints in relation to the long term management of the forest areas within Van Ban District. It is evident that due to the size of the area involved, the complexity of current and potential future forest management entities, the underlying low levels of poverty and associated forest-dependence of local communities, and not least, the limited resources available for conservation, considerably more discussion, consideration and planning is required in the development of long-term conservation strategies for Van Ban District.

The project work has enabled FFI and its partners, Lao Cai FPD to leverage funds from the EU to enable significant work to continue in the Hoang Lien Son, including Van Ban, between July 2003 and June 2006. This will build on all the development work and lessons learnt from the Darwin project both for further work in Van Ban and

more widely in the Hoang Lien Son. The access to the EU funds meant that the Darwin project could more clearly help to elucidate the complexities that were identified during the field activities. In the longer term this is more likely to mean the development of effective and innovative management approaches to the forest in Van Ban District.

Due to the delays in the contract process and availability of funds the original planned overlap between the Darwin and EU was reduced to less than 6 months. This has reduced the synergy but as key staff are now employed in the EU project lessons learnt are being carried forward. As a result of limited capacity in Lao Cai FPD (the projects partners) there were some administrative delays as attention was focused on the work necessary to develop the Van Ban project in the longer term in relation to the EU project as well as demands of developing the Lao Cai Provincial 10 year Strategy for Special Use Forests.

As the complexity of the site became apparent further detailed biological and socio-economic studies were commissioned, over and beyond that originally proposed.

Please see attached in Appendix 6 a text version of the comprehensive Technical Report for Van Ban and the socio-economic synthesis which gives full details of the scientific and technical work completed during this project. We will send you a copy of the Technical Report as soon as it is published.

The Technical Report contained in Appendix 6 was reviewed by:

- ◆ A. J. Tordoff – Conservation Biologist with 6 years experience in SE Asia, now at Birdlife International.
- ◆ Barney Long – Conservation Biologist for WWF Indochina programme with 5 years experience in Vietnam and SE Asia.
- ◆ Sara Oldfield – Global Programme Director FFI.

Each report in Appendix 7 indicates the staff involved (FFI, project partners and contracted staff) as well as the methodology used for that particular study.

Botanical work submitted for publication in *Oryx* has been subject to normal academic peer review.

Two reference collections have been established in the host country: one of vascular plants and the second of amphibians and reptiles species. Duplicate herbarium reference collections have been sent to major herbaria globally including Royal Botanical Gardens, Kew, London; the Komorov Institute of Botany, St Petersburg and the Missouri Botanic Gardens, St. Louis, USA.

Formal training activities have been limited in this project. Where training has been undertaken it has been done in two ways.

Formal Training:

- ◆ identification of a suitable candidate for ‘Conservation Awareness’ training as no qualified staff were available for recruitment. She was then sent for a formal training course at the Cuc Phuong National Park conducted by a local Vietnamese NGO ‘Environment for Nature Vietnam’.
- ◆ One staff member attended a course on NTFP Market Analysis and Development run by the NTFP Research Center, Hanoi.
- ◆ Note: These two people’s experience with the Darwin project contributed to

their skills and knowledge levels and therefore to their ability to undertake postgraduate study. These two staff members are due to return to FFI and work in the Hoang Lien Son following completion of their studies. This approach, whilst sometimes causing difficulties within the project can lead to the longer term capacity building in conservation in Vietnam.

Informal Training:

- ◆ The second approach was through taking a number of FFI and partner staff members and training them 'on the job'. This applies to both national and international staff who, under the mentoring of the FFI Vietnam Director and other senior staff, have learnt how to deal with the practical realities of project management, community development and participatory research activities. The opportunity for these people to work with specialists from Kew (e.g. Dr. A. Farjon) has provided extensive benefit to them personally and to the understanding of the biodiversity in Van Ban.
- ◆ The way the institutional management of forestry is organised in Vietnam means that the regular Provincial Forest Protection staff are general managers rather than the subject specialists who would normally undertake detailed surveys. Under Vietnamese forest management approaches these staff are not assigned to an area until after the gazettement process has been finalised. This does leave a resource gap and, whilst this project did involve staff from some specialised institutions e.g. IEBR and HNU, the FPD Lao Cai did not have specialists to engage in this work. This has meant that there has been a limited opportunities for the development of the specialised technical capacity of Lao Cai FPD.
- ◆ Through the Conservation Awareness component, staff from local schools, the TV/radio station in Van Ban, and the Youth Union have been engaged in a number of activities. This has helped to raise their knowledge and understanding of conservation issues.

5. Project Impacts

The project has helped to increase the profile of this priority site of Van Ban District for conservation within Lao Cai Province. For reasons discussed above, the gazettement of a protected area has yet to take place. This means that detailed involvement of the community in management has yet to be worked out. The recommendations from the work, for further discussion with the FPD Lao Cai and other provincial agencies, is based on the development of a range of community roles in management. These might include land allocation to communes for community management with biodiversity as a key management objective, through to representatives of communes being involved with the District Management Board. In line with moves by the Government of Vietnam to decentralise a range of management function to the lower levels as well as increasing the oversight of the elected Peoples Councils the work on this project fits in well with these aspirations in conservation management.

Raising awareness within the local communities of the conservation of species and forest ecosystems has been an important component of the project that will enhance community involvement in future biodiversity management activities.

Whilst it was expected that the biological surveys would find a number of rare and/or

new species there were a number of particularly important finds. These include (see Table 6.1 in Technical Annex for further details):

- discovery of the globally threatened conifer *Taiwania cryptomeriodes* in Van Ban District – previously unknown in Vietnam;
- a taxonomically unknown species of Muntjac;
- a new population of the globally threatened Vietnamese salamander
- extent of sub-montane/hill evergreen forest

As indicated above, the project has contributed to increasing the profile of this site within the Hoang Lien Son and therefore within Vietnam's developing protected area network. The project has and will through the follow-on EU project, enabled the facilitation of a much broader process towards innovative approaches to management of forest land for conservation and livelihood development. In the longer term the lessons from this process will be fed through into national and possibly international (through links to China) management of the Hoang Lien Son ecosystem. FFI is a signatory to the Vietnamese Forest Sector Support Programme which brings together all donors working in the Forestry sector in Vietnam to provide co-ordinated inputs into the work of the Ministry of Agriculture and Rural Development (including Forest Protection) at national and provincial levels.

Training within the project has resulted in:

- Conservation Awareness staff member trained has now been awarded a scholarship with Ford Foundation on Conservation Management from November 2003.
- NTFP specialist member trained has now been awarded a scholarship with Ford Foundation to study in the East-West Centre, University of Hawaii in Conservation Management from April 2002.

In Vietnam Civil Society does not exist as it does in many countries. Instead of NGOs and other organisations there are Mass Organisations (Farmers Union, Women's Union, Veterans Association etc). These are related to the activities of the Vietnam Communist Party and go through all levels of society. Within Van Ban District the Youth Union have been active in the conservation awareness activities at both school and community level.

Outputs 5 & 6 of the Darwin project indicated that there should be a full stakeholder process. It is now envisaged that this process will be carried out under the follow on EU project. This process will help to design and develop appropriate management strategies for the complexity of forest areas in Van Ban District. This will include a range of meetings at village and commune level and will include full representation from the mass organisations and People's Councils. There will be direct attempts to bring in the most disadvantaged groups in local communities.

As the current Darwin project has focused primarily on information gathering and analysis the social impact at the grass roots level has so far been minimal. However the understanding that has been gained through the socio-economic and land use studies should, in the follow-on project, facilitate effective management planning which takes account of local needs and aspirations. A key principle informing the work of FFI and its partners is that the project should be poverty neutral as a minimum. However there is a strong focus on developing elements that assist in the

Government of Vietnam's stated aims through the CPRGS² of eliminating poverty and increasingly rural livelihoods especially for ethnic minorities.

The Community awareness work, as well as the work with schools, has increased local peoples understanding of the value of key species and the need to engage in issues of forest protection. A review of this work was undertaken in December 2003 within the project and a full report produced.

6. Project Outputs

Differences in outputs from those in the initial schedule are linked to the changed focus of the project towards the survey and analysis rather than the gazettement. The production of this type of material does not directly lend itself to major media work. As explained to Defra, ongoing reference to the Darwin project activities will be made during the implementation of the EU project in the same area. Material containing the Darwin logo – e.g. the 'banners' for biodiversity conservation in the Hoang Lien Son will be used routinely for local, regional and national activities during the EU project e.g. use by the Vietnam Fatherland Front for environmental awareness activities within the adjacent Hoang Lien National Park.

Detailed publications (refereed and non-refereed) will also continue after the closure of the Darwin project. This will include website and other public domain (in Vietnamese and English) opportunities for publication.

The information from the project will continue to be disseminated through the EU project which follows on from this Darwin project. Formal and less formal publications will be written for suitable publications, conferences/workshops and other activities.

At Defra's invitation, the project team leader from FFI Vietnam attended and made a presentation at a Darwin side-event at the CBD COP7 meeting held in Kuala Lumpur in February 2004.

1. Project Expenditure

<i>Item</i>	Budget	Expenditure
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The overspend on travel and subsistence is due to the increased number of trips made to and around the project site as the project duration was extended by 9 months. The underspend on capital items is because, after the refocusing of the project objectives, the model propagation of endangered plants activity was scaled down.

² The Comprehensive Poverty Reduction and Growth Strategy – the local name for the Poverty Reduction Strategy Poverty.

8. Project Operation and Partnerships

The local partners included:

- The main project partners were, and remain, the Lao Cai Forest Protection Department as well as Van Ban District Forest Protection Station.
- From scientific institutions staff were involved from IEBR and from HNU.
- Youth Union – in relation to Conservation Awareness.
- Van Ban District TV and Radio Station;
- As we did not move to a gazettelement process FIPI were not therefore involved in the project.

One of the main modifications to the work programme – related to gazettelement – was made primarily as a result of an assessment of the situation by the Forest Protection Department Lao Cai who were unable to proceed with this during the project lifetime.

Collaboration with similar projects included:

- Birdlife International (based in Vietnam) in relation to specific scientific surveys and analysis. More specifically with the Danida funded project *'Improved conservation planning through institutional strengthening in Cambodia, Laos and Vietnam'*.
- The Darwin funded 'Preservation, Rehabilitation and Utilisation of Vietnamese Montane Forests' implemented by the Royal Botanical Gardens Edinburgh and their Vietnamese Partners the Central Forest Seed Company.
- The 'Stengthening Protected Area Management' project managed by WWF IndoChina and FPD in MARD in relation to Lao Cai.
- Data from Van Ban was included in the Global Amphibian Assessment with the SEAsian workshop taking place in Sept/October 2002. This process is led by Centre for Applied Biodiversity Science-Conservation International and IUCN.
- TRAFFIC and FPD work, funded by Danida, on developing a National Action Plan on Wildlife Trade in Vietnam.
- CEPF liaison for the inclusion of the Hoang Lien Son ecosystem (including Van Ban) as a priority area within the 'Indo-Burma HotSpot'.
- Collaboration with Birdlife International and FIPI to provide information on Van Ban District for the 'Sourcebook of existing and proposed Protected Areas in Vietnam.'

The main international partners were:

- Fauna & Flora International – especially Global Trees Campaign
- Kew Gardens (Dr. Aljos Farjon)
- In later stages in relation to ex situ conservation of Taiwania – Royal Botanical Gardens, Edinburgh (under their Darwin project)
- Komorov Botanical Institute, St. Petersburg (Professor Leonid Averyanov)

- Australian Volunteer International – through provision of an ethnobotanical volunteer to work on issues relating to Cardamom cultivation

The Darwin project has led into (in fact a short overlap) with the EU Funded ‘Community Conservation of the Hoang Lien Son’ which will continue to work in Van Ban District. Local partners e.g. Forest Protection Lao Cai are the implementation partners of this new project. Therefore key district and commune level partners will continue to be actively involved over the next 3 years of project implementation.

9. Monitoring and Evaluation, Lesson learning

During the early stages of the project it became apparent that there was little or no baseline information available for the forest resources and biodiversity status of Van Ban District. Therefore the strategy of the project was to concentrate on developing good baseline information which could, in the future, inform the management and monitoring decision making processes.

The awareness work contained within its application a degree of routine monitoring. This was followed up by an end of project evaluation, with key stakeholders, of the impact of this work – including the broadcasts in 4 local languages.

Following the completion, translation and publication of the technical synthesis report and the Socio-economic report it is planned to hold a workshop, with key stakeholder, in Van Ban District in late February 2004. This workshop, whilst reviewing the Darwin project, will also act as a starting point for the development of the management approach for forest land in Van Ban.

There has been no external evaluation of the project, although as indicated the final technical synthesis document has been sent for local peer review. Regular work programmes were produced and regular (bi-annual) reports in Vietnamese, were discussed with project partners. This final report to Darwin, will also be translated and shared with our partners for their comments.

As part of the ongoing development of effective internal monitoring within FFI Vietnam the Darwin project activities were subject, from March 2002, to a process of routine development of MTORs (Mission Terms of Reference) and BTORs (Back to Office Reports) for every field visit or local workshop undertaken. These were circulated internally in FFI for widespread comment.

When designing community based projects in areas with little or no experience of this type of work, it is important to understand the amount of time and specialised inputs required for these processes both to be accepted and to be implemented. Unless significant ground work has already been done, then project with significant elements of community work should be undertaken over a 3 year period.

Where little or no biological data is available then it is important that time is available for analysis and reflection so that this material can be adequately digested and responded to. This is especially important if the implications of the work involve the development and piloting of possible new approaches to inclusive forms of biodiversity conservation management. In countries in transition, such as Vietnam, there are a wide range of initiatives which can have the effect of slowing down the ability of the government agencies to respond to new approaches to management. This is particularly true when one is looking to change the focus of forest land management from a ‘top-down – restrictive’ approach to a ‘bottom-up facilitative’ approach. The issues of institutional change, vested interests and other issues must be

addressed by this type of project if innovative ideas are to be taken on board. Creating 'buy-in' from a range of stakeholders takes time and is necessary, especially when there are added issues of lack of language skills, lack of literacy, poverty and remoteness.

It is found in remote areas in a country like Vietnam that District level staff (as well as commune cadres) are often left out of communication loop and find it difficult to find out about changes in policies and approaches which might have been approved at national level. When undertaking work with the grass-roots level this means that careful attention must be paid to communication. In the short term this can lead to slow implementation.

When undertaking community work as well as technical baseline surveys in countries with limited technical knowledge projects are likely to be successful if they have significant 'in-country' presence – especially when working with non-national bodies. If projects are providing some specialised technical input to well functioning organisations then it is likely that short-term inputs will be able to function well. Understanding the different input requirements for different project to be successful is important. The staff time requirements for successful community and local projects is likely to be much higher and require more 'in-country' presence.

A worrying concern related to increased urbanisation in Vietnam (and possibly other countries) is the difficulty in recruiting quality staff who are prepared to spend time in remote locations, working with ethnic minorities. The current training situation at Vietnamese Universities is such that new graduates do not have the skills required to undertake the work necessary. This combined with low levels of attendance at national universities by ethnic minorities and people from remote areas leads to a shortfall in appropriate staff. This results in the need for detailed training of any new staff who show an aptitude for this type of work, which can slow down implementation. Darwin management should consider the implications of this both in terms of facilitating more 'on the job' capacity building as well as the effect on project time-lines.

10. Darwin Identity:

All public domain publications will contain the Darwin Initiative logo and details of the Darwin funding.

Recent Conservation Awareness material for the biodiversity of the Hoang Lien Son has the Darwin Initiative Logo on.

Future web-site material, where it refers to work undertaken using Darwin funding, will include the Darwin logo.

Forest Protection Department at National and Provincial level are well aware of the Darwin Initiative. FPD Lao Cai does not generally attract significant amounts of donor funding so the funding has a high profile within this institution.

This project is a provincially implemented project and therefore has a high profile at that level. This project has not had a national level profile.

11. Leverage

- £30,000 was leveraged from BAT in relation to conifer conservation. This forms part of the wider Global Trees Campaign.
- Around US\$1 million from the EU has been agreed. This, with other forms of co-finance from USFWS, Margot Marsh Foundation and

Disney as well as NZAID means that there is a wider project working on 'Community Conservation of the Hoang Lien Son'. This integrated project is due to run until June 2006 and includes significant work in Van Ban District, Lao Cai Province.

In addition the HLSP will continue to work with the project partners to meet the required conditions to apply for funding from the new GEF/Netherlands Government funding (Vietnam Conservation Fund) to facilitate the management of protected areas.

12. Sustainability and Legacy

The Darwin project has been phased into the larger EU project of the same name. Current partners will remain working under this project. Work on the production of a 'Conifer Status Review for Vietnam' is continuing to bring together FFI Vietnam, IEBR as well as staff from Kew Gardens and the RBGE and the Global Trees Campaign (GTC).

With the GTC it is also hoped that funding will be secured for further work on *Fokienia* in order to develop a long term Conservation Action Plan for this valuable and increasingly rare timber tree.

Darwin has enabled the preparatory work to enable a participatory stakeholder process to be undertaken to develop innovative management approaches to forest land and biodiversity conservation in Van Ban District.

One of the key aims of the development of the participatory management planning process proposed for Van Ban District will be to consider novel ways of developing protection for biodiversity within a sustainable management and financial framework.

The process of applying the project's conclusions and outputs is ongoing. The management lessons learnt are being incorporated into wider aspects of participatory management planning within the Hoang Lien Son ecosystem.

Technical outputs have informed a number of recent conservation priority setting activities which will have long term (10 year) consequences for funding and resource allocation in country and regionally. These include:

- National Conifer Status Review;
- Global Amphibian Assessment;
- CEPF Ecosystem Profile Development;
- IBA Network
- Lao Cai Provincial 10 Year Special Use Forest Strategy
- National Special Use Forest Strategy – MARD

Funding for the community and management planning process work is already in place under EU funding.

13. Post-Project Follow up Activities (max. 300 words)

The current EU project primarily provides funding for community/livelihood work as well as the associated management planning processes. What it does not cover, is technical work that has been shown, through the Darwin project, as critical in order to be able to provide effective management plans for the range of different forest land types in Van Ban District. The current HLSP (which has a Project Management Unit

office in Lao Cai FPD as well as a field office in Sa Pa District Lao Cai as well as established MoUs and working relationships) would provide the support necessary for the implementation of this Post Project Funding so that work could be focused. The HLSP would therefore like the Darwin Initiative to support a key area of technical work which would build on the current project and help develop increased capacity and confidence of local partners in relation to adaptive ecosystem management planning.

Development of a GIS/ data management unit in Forest Protection Department, Lao Cai province. This unit would be **piloted** by undertaking work on Van Ban District in relation to the management plan and its monitoring and evaluation. This would include equipment purchase, material i.e. remote sense data purchase, as well as technical support for training and system development, from a relevant UK institution. This would enable the Lao Cai FPD to develop the GIS capacity and, more importantly, how to use GIS/RS and computerised techniques for data management and more significantly **long term monitoring and evaluation**.

The host country partner, Lao Cai FPD, has already been designated by the Lao Cai Peoples Committee as the partner to the Lao Cai Province sub-project of the EU HLSP. They are currently working actively to move forward the gazettelement process.

14. Value for money

The significance outputs of this project in terms of research and development of baseline biodiversity and socioeconomic data are considered to be a good return on the Darwin investment of £89,290. In turn the project has helped to leverage US \$ 1 million of funding from the EU which should help to secure the long-term viability of the forest ecosystems of the Van Ban District and the livelihoods of the local people who depend on natural resource management for their income.

Author(s) / Date:

Sheelagh O'Reilly, Steven Swan, Sara Oldfield / 29 March 2004

15. Appendix I: Project Contribution to Articles under the Convention on Biological Diversity (CBD)

Please complete the table below to show the extent of project contribution to the different measures for biodiversity conservation defined in the CBD Articles. This will enable us to tie Darwin projects more directly into CBD areas and to see if the underlying objective of the Darwin Initiative has been met. We have focused on CBD Articles that are most relevant to biodiversity conservation initiatives by small projects in developing countries. However, certain Articles have been omitted where they apply across the board. Where there is overlap between measures described by two different Articles, allocate the % to the most appropriate one.

Project Contribution to Articles under the Convention on Biological Diversity		
Article No./Title	Project %	Article Description
6. General Measures for Conservation & Sustainable Use	10	Develop national strategies which integrate conservation and sustainable use.
7. Identification and Monitoring	15	Identify and monitor components of biological diversity, particularly those requiring urgent conservation; identify processes and activities which have adverse effects; maintain and organise relevant data.
8. In-situ Conservation	10	Establish systems of protected areas with guidelines for selection and management; regulate biological resources, promote protection of habitats; manage areas adjacent to protected areas; restore degraded ecosystems and recovery of threatened species; control risks associated with organisms modified by biotechnology; control spread of alien species; ensure compatibility between sustainable use of resources and their conservation; protect traditional lifestyles and knowledge on biological resources.
9. Ex-situ Conservation	0	Adopt ex-situ measures to conserve and research components of biological diversity, preferably in country of origin; facilitate recovery of threatened species; regulate and manage collection of biological resources.
10. Sustainable Use of Components of Biological Diversity	15	Integrate conservation and sustainable use in national decisions; protect sustainable customary uses; support local populations to implement remedial actions; encourage co-operation between governments and the private sector.
11. Incentive Measures	0	Establish economically and socially sound incentives to conserve and promote sustainable use of biological diversity.

12. Research and Training	15	Establish programmes for scientific and technical education in identification, conservation and sustainable use of biodiversity components; promote research contributing to the conservation and sustainable use of biological diversity, particularly in developing countries (in accordance with SBSTTA recommendations).
13. Public Education and Awareness	30	Promote understanding of the importance of measures to conserve biological diversity and propagate these measures through the media; cooperate with other states and organisations in developing awareness programmes.
14. Impact Assessment and Minimizing Adverse Impacts	0	Introduce EIAs of appropriate projects and allow public participation; take into account environmental consequences of policies; exchange information on impacts beyond State boundaries and work to reduce hazards; promote emergency responses to hazards; examine mechanisms for re-dress of international damage.
15. Access to Genetic Resources	0	Whilst governments control access to their genetic resources they should also facilitate access of environmentally sound uses on mutually agreed terms; scientific research based on a country's genetic resources should ensure sharing in a fair and equitable way of results and benefits.
16. Access to and Transfer of Technology	0	Countries shall ensure access to technologies relevant to conservation and sustainable use of biodiversity under fair and most favourable terms to the source countries (subject to patents and intellectual property rights) and ensure the private sector facilitates such assess and joint development of technologies.
17. Exchange of Information	5	Countries shall facilitate information exchange and repatriation including technical scientific and socio-economic research, information on training and surveying programmes and local knowledge
19. Bio-safety Protocol	0	Countries shall take legislative, administrative or policy measures to provide for the effective participation in biotechnological research activities and to ensure all practicable measures to promote and advance priority access on a fair and equitable basis, especially where they provide the genetic resources for such research.
Total %	100%	Check % = total 100

16. Appendix II Outputs

Please quantify and briefly describe all project outputs using the coding and format of the Darwin Initiative Standard Output Measures.

Code	Total to date (reduce box)	Detail (←expand box)
Training Outputs		
1a	Number of people to submit PhD thesis	0
1b	Number of PhD qualifications obtained	0
2	Number of Masters qualifications obtained	0
3	Number of other qualifications obtained	0
4a	Number of undergraduate students receiving training	0
4b	Number of training weeks provided to undergraduate students	0
4c	Number of postgraduate students receiving training (not 1-3 above)	0
4d	Number of training weeks for postgraduate students	0
5	Number of people receiving other forms of long-term (>1yr) training not leading to formal qualification(i.e not categories 1-4 above)	0
6a	Number of people receiving other forms of short-term education/training (i.e not categories 1-5 above)	25
6b	Number of training weeks not leading to formal qualification	12
7	Number of types of training materials produced for use by host country(s)	7
Research Outputs		
8	Number of weeks spent by UK project staff on project work in host country(s)	175
9	Number of species/habitat management plans (or action plans) produced for Governments, public authorities or other implementing agencies in the host country (s)	1
10	Number of formal documents produced to assist work related to species identification, classification and recording.	0
11a	Number of papers published or accepted for publication in peer reviewed journals	2
11b	Number of papers published or accepted for publication elsewhere	2
12a	Number of computer-based databases established (containing species/generic information) and handed over to host country	0
12b	Number of computer-based databases enhanced (containing species/genetic information) and handed over to host country	0
13a	Number of species reference collections established and handed over to host country(s)	2 (Herbarium & Herpetological)
13b	Number of species reference collections enhanced and handed over to host country(s)	0

Dissemination Outputs		
14a	Number of conferences/seminars/workshops organised to present/disseminate findings from Darwin project work	0
14b	Number of conferences/seminars/ workshops attended at which findings from Darwin project work will be presented/ disseminated.	3
15a	Number of national press releases or publicity articles in host country(s)	1 – included in the 100 years of FFI & launch of EU HLSP
15b	Number of local press releases or publicity articles in host country(s)	
15c	Number of national press releases or publicity articles in UK	1
15d	Number of local press releases or publicity articles in UK	0
16a	Number of issues of newsletters produced in the host country(s)	0
16b	Estimated circulation of each newsletter in the host country(s)	
16c	Estimated circulation of each newsletter in the UK	
17a	Number of dissemination networks established	
17b	Number of dissemination networks enhanced or extended	
18a	Number of national TV programmes/features in host country(s)	
18b	Number of national TV programme/features in the UK	
18c	Number of local TV programme/features in host country	
18d	Number of local TV programme features in the UK	
19a	Number of national radio interviews/features in host country(s)	
19b	Number of national radio interviews/features in the UK	
19c	Number of local radio interviews/features in host country (s)	Radio broadcasts in 4 languages over 9 months on 6 topics: Total around 150 broadcasts.
19d	Number of local radio interviews/features in the UK	
Physical Outputs		
20	Estimated value (£s) of physical assets handed over to host country(s)	
21	Number of permanent educational/training/research facilities or organisation established	
22	Number of permanent field plots established	
23	Value of additional resources raised for project	Approx US\$1 million for Community Conservation of the Hoang Lien Son - including Van Ban District. £30,000 from BAT for tree conservation linked to Global Trees Campaign.

17. Appendix III: Publications

Provide full details of all publications and material that can be publicly accessed. Details will be recorded on the Darwin Monitoring Website Publications Database.

Mark (*) all publications and other material that you have included with this report

Type *	Detail	Publishers	Available from	Cost £
(e.g. journal paper, book, manual, CD)	(e.g. title, authors, journal, year, pages)	(name, city)	(e.g. contact address, email address, website)	
Published Report*	Swan, S.R. & S.M.G. O'Reilly (eds.) (2004). <i>Van Ban: A Priority Site for Conservation in the Hoang Lien Mountains. Community-based Conservation in the Hoang Lien Mountains: Technical Report No. 1.</i>	Fauna & Flora International Vietnam Programme, Hanoi.	Fauna & Flora International Vietnam Programme, IPO Box 78, Hanoi GPO, VIETNAM vietnam@ffi.org.vn	Not yet agreed
Report*	Tran van On, Tran Manh Hung, Tu Minh Tiep, Tran Tuan Hai (2002) <i>A survey on non timber forest products in Liem, Na Nheo and Phieng Doong villages, Van Ban District, Lao Cai Province</i>	Fauna & Flora International Vietnam Programme, Hanoi	Fauna & Flora International Vietnam Programme, IPO Box 78, Hanoi GPO, VIETNAM vietnam@ffi.org.vn	Free
Report*	Buckingham, S. & Tu Minh Tiep (2002) <i>Community land-use mapping and agro-ecology resources of three villages in Van Ban District, Lao Cai Province.</i>	Fauna & Flora International Vietnam Programme, Hanoi	Fauna & Flora International Vietnam Programme, IPO Box 78, Hanoi GPO, VIETNAM vietnam@ffi.org.vn	Free
Report*	Nguyen Quang Truong (2002). <i>A rapid survey of the herpetofauna of Van Ban District.</i>	Fauna & Flora International Vietnam Programme, Hanoi	Fauna & Flora International Vietnam Programme, IPO Box 78, Hanoi GPO, VIETNAM vietnam@ffi.org.vn	Free
Report	Cox, S & Tran Manh Hung (2002). <i>Socio-economic Status and Forest Resource Use of Three Villages in Van Ban District, Lao Cai Province, Vietnam</i>	Fauna & Flora International Vietnam Programme, Hanoi	Fauna & Flora International Vietnam Programme, IPO Box 78, Hanoi GPO, VIETNAM vietnam@ffi.org.vn	Free
Report*	Buckingham, S. & Tu Minh Tiep (2003) <i>A rapid characterization of Cardomom Amomum aromaticum (Roxb.) cultivation in three villages in Van Ban District, Lao Cai Province</i>	Fauna & Flora International Vietnam Programme, Hanoi	Fauna & Flora International Vietnam Programme, IPO Box 78, Hanoi GPO, VIETNAM vietnam@ffi.org.vn	Free

Journal paper Averyanov L., Phan Ke Loc, Turczaninowia
Nguyen Tien Hiep & Do Tien
Doan (2003). Highland
vegetation and flora of Van
Ban District,
*Lao Cai Province in northern
Vietnam.*

Journal paper *Farjon, A., Thomas, P. &*
Submitted to *Nguyen Duc To Luu (in*
Oryx *press) Conifer conservation*
in Vietnam – case reports of
three potential ‘flagship
species’.

18. Appendix IV: Darwin Contacts

To assist us with future evaluation work and feedback on your report , please provide contact details below.

Project Title	
Ref. No.	
UK Leader Details	
Name	Sara Oldfield
Role within Darwin Project	Project Team Leader, UK
Address	FFI, Great Eastern house, Tenison Road, Cambridge CB1 2TT
Phone	
Fax	
Email	
Other UK Contact (if relevant)	
Name	Dr Sheelagh O'Reilly
Role within Darwin Project	(New) Project Team Leader, Vietnam
Address	Hoang Lien Son Community Based Conservation Project, Forest Protection Station, Hoang Lien National Park, Fan Si Pan Road Sa Pa, Lao Cai
Phone	
Fax	
Email	
Partner 1	
Name	
Organisation	
Website address	
Role within Darwin Project	
Address	
Fax	
Email	
Partner 2 (if relevant)	
Name	
Organisation	
Role within Darwin Project	
Address	
Fax	
Email	

19. Appendix V: Logical Framework

Project summary	Measurable indicators	Means of verification	Important assumptions
Goal Long term conservation of priority areas in Vietnam	1 Formal recognition of new protected areas and protection mechanisms	1 Areas designated and mechanisms endorsed	1 Continued commitment by Vietnamese authorities
Purpose Community-based conservation of Hoang Lien Mts.	2 Reduced rate of unsustainable NTFP extraction, forest conversion and hunting	<i>2 Fixed-point photography</i> <i>3 Trade studies</i>	2 Viable populations of endangered plants and primates still exist

<p>Outputs</p> <p>1. Priority sites for plant and primate conservation identified. Threat analyses for endangered species & habitats (e.g. trade study).</p> <p>2. Village conservation stewardship agreements in place (e.g. improvement of forest protection contracts and local forest protection regulations)</p> <p>3. Increased awareness for plant and primate conservation</p> <p>4. Propagation of endangered plants and /or development of more sustainable systems of NTFP extraction</p> <p>5. Improved community participation in protected area management and law enforcement</p> <p>6. Gazettement of new protected area in Van Ban district (or expansion of existing Hoang Lien reserve)</p>	<p>1 Gap and threat analysis (key habitat localities)</p> <p>2 Level of community-based forest protection.</p> <p>3 Attitudes and actions of selected target groups towards plant conservation</p> <p>4 Endangered plant species are sustainably extracted or propagated</p> <p>5 Level of community conservation activities</p> <p>6 Feasibility study and investment plan</p>	<p>1 Botanical survey reports 2 Trade survey report 3 GIS maps</p> <p>4 Review of forest contractee compliance reports</p> <p>5 Knowledge and attitude surveys</p> <p>6 Models of NTFP management and/or plant propagation</p> <p>7 Community rights and responsibilities with protected areas are defined in management plan</p> <p>8 Gazettement decree</p>	<p>1 Sufficient taxonomic expertise and data available</p> <p>1 Offenders will be apprehended and prosecuted</p> <p>1 Knowledge changes attitudes and people have the capacity for the greater good 2 Recipients receptive to arguments and will want to participate.</p> <p>3 Expertise for orchid / gymnosperm cultivation available</p> <p>4 Political will for increased community role in protected area system</p> <p>5 Political will to expand the current protected area system</p>
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Activities			
1.5 Systematic biological surveys	£5,000	Survey reports published	Survey permits issued Weather conditions permit site access
1.2 Threat analysis	£2,000		
1.3 Identification of priority sites	£2,000	Threat analysis published Priority site reports	
1.4. Carry out studies of commodity chains of plant resources.	£4,000	Study reports	
1.5 Strengthen regulatory environment where necessary.	£1,700	Regulations endorsed	
	£1,000		Vietnamese FPD authorities collaborate in development of new contracts and new regulations
2.1. Develop the scope of forest protection contracts to include plant and primate protection and expand this system to critical plant areas within and outside the protected area	£5,000	New Forest Protection Contracts issued	
2.2. Develop village-based forest protection regulations and penalties	£7,000	Regulations endorsed	
2.3. Develop stewardship agreements with individual households that obtain development assistance for propagation of endangered plant species that ensure in-situ conservation.	£6,500	Agreements signed	
	£5,500	Awareness monitoring reports	No special factors apply. FFI is a leader in conservation awareness work in Vietnam
3.1. Conservation awareness training programme		Materials published	
3.2. Develop conservation awareness materials for endangered plants and gibbons.	£10,500	Records of awareness events	
3.3. Develop village-based conservation awareness programme with women's union, youth groups, and schools	£1,600	Press cuttings, radio and TV broadcasts	
3.4. Develop public media campaign for conservation of endangered species in the Hoang Lien Mts.			

4.1. Assess current rate of NTFP extraction and trade	£3,500	Assessment report	Communities participate in assessments
	£6,000	Extension visit records	
4.2. Provide extension for sustainable NTFP extraction and propagation of endangered plant species in home gardens	£3,000	Study report	FPD collaboration
5.1. Conduct feasibility study for gazettement of new/ or expanded reserve in Van Ban district	£3,000	Workshop outputs	
5.2. Conduct stakeholder consultation workshop for reserve gazettement	£1,700	Plan document	
5.3. Develop investment plan and submit to government for approval	£2,750	Plan document	No special factors. FFI has already developed on participatory management plan in Vietnam
6.1. Develop protected area management plan with full participation of local communities	£1,000	Boundary delineation map	
6.2. Facilitate participatory boundary delineation		Consultation events	
6.3. Develop mechanism for regular community consultation			