

Darwin Initiative

Annual Report

1. Darwin Project Information

Project Ref. Number	14-016
Project Title	Assessing and conserving plant diversity in commercially managed tropical rainforests
Country(ies)	Malaysia
UK Contractor	Royal Botanic Gardens, Kew
Partner Organisation(s)	Yayasan Sabah Group
Darwin Grant Value	£ 173,100
Start/End dates	April 2005 to April 2009
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	April 2005 to April 2006 First annual report
Project website	http://lion.rbgkew.org.uk/science/directory/projects/DiversityForestsSaba.html
Author(s), date	Rogier de Kok, 28 April 2006

2. Project Background

Much of the plant diversity of the lowland rainforests of Sabah (Malaysian Borneo) resides in the timber concessions of forestry companies. As a key ecosystem component in supporting and maintaining general biodiversity, it is critically important that plant diversity in managed forests is assessed and high conservation value forests are protected. This could ideally be done through the framework of Forest Stewardship Council certification (FSC), which endorses timber from forest which are sustainability managed. Part of this certification is the recognition and protection of areas with high conservation values. However there is a lack in plant identification and habitat assessment skills in Sabah. This project aims to address this knowledge hiatus through a programme of training, research and institutional capacity building within the Sabah Forest Department (SFD), Yayasan Sabah (YS) and other major Malaysian forest management companies in the following areas:

3. Project Purpose and Outputs

- State the purpose and outputs of the project. Please include your project logical framework as an appendix (see appendix 1) and report achievements and progress against it (or, if applicable, against the latest version of the logframe).

This project aims to address the lack in plant identification and habitat assessment skills in Sabah, through a programme of training, research and institutional capacity building within the Sabah Forest Department (SFD), Yayasan Sabah (YS) and other

major Malaysian forest management companies. The project aims to reach these goals through training (both formal as informal) course in the following subjects

Plant identification through staff training, use of herbarium specimens, targeted collecting and the production of printed and web-based checklists, inventories and interactive keys

Habitat assessment

Identification of High Conservation Value Forests based on plant diversity and vegetation type

Implementation of FSC certification principles relating to habitat and biodiversity conservation

Outputs

Plant identification: The first course was given in July 2005 in Danum valley. This course mainly dealt with collecting techniques and data basing and photography for the production of printed and web-based checklists and interactive key (see appendix 2 for list of participant, course timetable and pictures)

Habitat assessment: A series of workshops was given in 2006 which culminated in a manual for FSC certification in Sabah (see appendix 3, ProForest first draft report).

Identification of High Conservation Value Forests. The manual for FSC certification in Sabah was used during a fieldtrip in March 2006, in order to identify HCVF in FMU15 & 16 in the Yayasan Sabah concession area (see appendix 3 ProForset first draft report).

Implementation of FSC certification. A course was given in 2006 dealing with the principles under pinning FSC certification and its implication area (see appendix 3, ProForset first draft report).

- Have the outputs or proposed operational plan been modified over the last year, for what reason, and have these changes been approved by the Darwin Secretariat? (Please note that any intended modifications should be discussed with the Secretariat directly rather than making suggestions in this report).

The only major change in the operation plan has been at the request of Yayasan Sabah. They asked for the HCVF assessment and the writing of the FSC certification report to be put forward. YS have hired ProForest, in a separate contract from its involvement in this Darwin Project, to facilitate this. The result is that this part of the Darwin project will be finished in 2006, the second year of the project rather than in its third year.

Collecting in Imbak Canyon has not started due to infrastructure problems at the site. The building of the research and accommodation buildings have been delayed by least a year. The person employed by the project to work at the site is momentarily based at Maliau Basin. He is helping his colleague there and his Maliau colleague will in tern will help him at Imbak as soon as the infrastructure is ready.

The expect training for core staff members hired by the project in Kew which was originally plant for April 2005, had to be postponed due to the death of the father of one of our staff members. The training course will be held in the late summer of 2006.

4. Progress

Key people involved in the project have been notified that the project was given funding by the Darwin Initiative and planning was started. Key personnel were hired for the project. A Memorandum of Understanding (MOU) has been signed between Kew and YS, in order to facilitate this project see appendix 4.

The project was initiated in July 2005 with a Plant Identification and Collecting Techniques Course in Danum Valley, Sabah. The course was given by two staff members of Kew (Dr. Rogier de Kok & Mr. Jonathan Gregson) and was attended by all people working within the project, plus additional students from Yayasan Sabah and Danum Valley Research Centre (see appendix 2). Plant collecting has started in both the Danum valley and Maliau basin areas, while due to infrastructure problems, collecting in Imbak Canyon had to be postponed by at least 12 months.

Data basing of specimens in the Sandakan Herbarium, from the three targeted areas, has started in October 2005, with the appointment of one full time staff member.

Collecting equipment, digital cameras, computers and office equipment were acquired for the project and installed. A short course in how to use the equipment has been given during the Plant Identification and Collecting Techniques Course in July.

- Summarise progress over the last year against the agreed baseline timetable for the period and the logical framework (complete Annex 1). Explain differences including any slippage or additional outputs and activities.

Training workshops (held in Sabah) for up to 20 participants per year

This training work shop has been given in July 2005 (see appendix 2)

Training in plant collecting & identification at RBG Kew for core collecting staff

Due to personal circumstance of one of the core participants, the training in Kew had to be postponed to the summer of 2006.

Preliminary printed & web-based checklists produced each year

The web based checklist will be hosted on the new developed Royal Society Danum valley website, which will be launched in late 2006. A preliminary printed checklist will then also be produced.

Targeted collecting & collation of plant specimens

1000 specimens have been made. This has is only half of the number of specimens that we promised. This delay is partly due to the fact that no collection could be done at Imbak so far and that one of our Core staff members had to temporally return to Indonesia to look after for family. In July 2006, the next course in tropical plant identification course will be held in Sabah, this and together with a speeding up of the collecting effort will soon deal with this shortfall.

Basic vegetation mapping of YS concession

This has not been done this year, but money has been reserved by Yayasan Sabah, reach and development division for this work to be done in the next financial year

First set of collections identified and deposited in Sandakan, FRIM, Singapore, Sarawak and Kew herbaria

Because we needed to postpone the identification course till the late summer 2006, this has not been done. We will do this in the summer of 2006.

Production of web based plant checklist

Royal Society, Danum Valley project is redesigned its websites; the plant checklist with the pictures will be hosted on this new website. We are aiming at a launch date of July/August for this redesigned site.

Habitat assessment & identification of HCVF's Phase 1 course

Habitat assessment & identification of HCVF's workshops given and assessments done. This part of the project is well ahead of the projects timetable and will be finished in the financial year 2006/2007. One year ahead of schedule.

- Provide an account of the project's achievements during the last year. This should include concise discussion on methodologies and approaches by the project (e.g. research, training, planning, assessment, monitoring) and their consequences and impacts as well as results. Please **summarise** content on methodologies and approaches, and, if necessary, provide more detailed information in appendices (this may include cross-references to attached publications).

The project has begun a series of training courses in plant collecting and identification which will enhance the training level both at Yayasan Sabah and the Forest Department. The Habitat assessment & identification of HCVF Courses and fieldwork has been very successful and fully attended by Yayasan Sabah, Forestry Department, Conservation workers and interested parties from Industry (Forestry and Palm Oil). This part of the project is ahead of its timetable.

- Discuss any significant difficulties encountered during the year and steps taken to overcome them.

The main difficulty we encountered in the first year is the delays in making plant specimens. This is partly due building problems at Imbak and personal ones by one of the core staff members. The Imbak problem is dealt with by organising a series of collecting trip from both Maliau and Danum valley. The personal problems of one of the core staff members are in the past.

- Has the design of the project been enhanced over the last year, e.g. refining methods, indicators for measuring achievements, exit strategy?

The only major enhancement over the last year is that the HCVF assessment and the writing of the FSC certification report have been put forward at the request of Yayasan Sabah. The fact that they appreciate the value of the FSC certification process and have put extra resources into supporting this part of the project is significant and this will be a major part of the legacy of the project.

- Present a timetable (work plan) for the next reporting period.

No new timetable is needed

Actions taken in response to previous reviews (if applicable)

- Have you responded to issues raised in the review of your last year's annual report? Have you discussed the review with your collaborators? Briefly describe what actions have been taken as a result of recommendations from last year's review.

Not applicable

5. Partnerships

- Describe collaboration between UK and host country partner(s) over the last year. Are there difficulties or unforeseen problems or advantages of these relationships?

Are two main collaborators are:

Yayasan Sabah (YS): A state-owned charitable foundation dedicated to the provision of welfare, education and other services. Profits mostly derived from a ± 1 million ha forest concession, which includes commercial forest reserves of over 750,000 ha and three major primary forest conservation areas - Danum Valley, Maliau Basin and Imbak Canyon. 5 staff member have been seconded to the project. Together with staff of the Royal Society they have collected 1000 specimens. Furthermore 18 junior staff members attended the training course in July and 19 more senior staff has been heavily involved in the HVCF workshops in Kota Kinabalu in 16-17 January 2006 and they have supported the fieldwork needed for the HCVF assessment.

Sabah Forest Department (SFD): The overall custodian of all forest reserves in Sabah (commercial and protected) and it managed the main herbarium in Sabah. A data baser has been employed at the Herbarium and 1500 separate collections held at Sandakan, from the research area have been data based. Three staff members of the SFD have played an important role in the HVCF workshops in Kota Kinabalu in 16 January 2006.

- Has the project been able to collaborate with similar projects (Darwin or other) in the host country or other regions, or establish new links with / between local or international organisations involved in biodiversity conservation?

Many local and international conservation agencies have been involved in the HVCF workshops in Kota Kinabalu in 16-17 January 2006, in particular Sabah Environmental Protection Department, Sabah Wildlife Department, WWF Malaysia, University of Malaysia, Sabah, Oxford University (UK), Imperial college (UK), York University (UK) and the Wildlife Conservation Society.

6. Impact and Sustainability

- Discuss the profile of the project within the country and what efforts have been made during the year to promote the work. What evidence is there for increasing

interest and capacity for biodiversity resulting from the project? Is there a satisfactory exit strategy for the project in place?

Many local institutions have been involved in the project; apart from Yayasan Sabah and Forest Department Sabah the following organisations have been involved: Sabah Environmental Protection Department, Sabah Wildlife Department, WWF Malaysia, and University of Malaysia, Sabah. The signing of the MOU was well attended by senior staff of YS and was covered in local media. The data based specimens at Sandakan will become part of its general databases and the species collected will become part of the general collections of the various institutions. The FSC certification will have a significant influence on the management of the natural forest in the YS concession area.

7. Outputs, Outcomes and Dissemination

- Explain differences in actual outputs against those agreed in the initial 'Project Implementation Timetable' and the 'Project Outputs Schedule', i.e. what outputs were not or only partly achieved? Were additional outputs achieved?

As the project is in its first year there are not many outputs, see also question 4.

- Provide details of dissemination activities in the host country during the year, including information on target audiences. Will dissemination activities be continued by the host country when the project finishes, and how will this be funded and implemented?

As the project is in its first year there are not many outputs, see also question 4.

- Please expand and complete Table 1. **Quantify** project outputs over the last year using the coding and format from the Darwin Initiative Standard Output Measures (see website for details) and give a brief description. Please list and report on appropriate Code Nos. only. The level of detail required is specified in the Guidance notes on Output Definitions, which accompanies the List of Standard Output Measures. Only the summarised totals after the end of your project will be recorded on the Darwin project database from your final report (the totals below will help you to keep track on a yearly basis).

Table 1. Project Outputs (According to Standard Output Measures)

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	TOTAL
6A & 6B	Plant identification course	50				
20	Equipment					
13B	Specimens	1000				

15C	Kew Scientist	1
12A	web based plant checklist	Not done

- In Table 2, provide full details of all publications and material produced over the last year that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Details will be recorded on the Darwin Monitoring Website Publications Database. Mark (*) all publications and other material that you have included with this report.

Table 2: Publications

Type * (e.g. journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (e.g. contact address, website)	Cost £
Journal	Kew Scientist	RBGKew	Royal Botanic Gardens Kew	Free

8. Project Expenditure

- Please expand and complete Table 3.

Table 3: Project expenditure during the reporting period (Defra Financial Year 01 April to 31 March)

- Highlight any recently agreed changes to the budget and explain any variation in expenditure where this is +/- 10% of the budget.

9. Monitoring, Evaluation and Lessons

- Discuss methods employed to monitor and evaluate the project this year. How can you demonstrate that the outputs and outcomes of the project actually contribute to the project purpose? i.e. what are the indicators of achievements (both qualitative and quantitative) and how are you measuring these?

Senior staff of Yayasan Sabah and Sabah Forest Department has been heavily involved in the HVCF workshops in Kota Kinabalu in 16-17 January 2006 and they have supported the fieldwork needed for the HCVF assessment. Yayasan Sabah has request for the HVCF assessment and the writing of the FSC certification report to be put forward. The FSC certification will have a significant influence on the management of the natural forest in the YS concession area. Given that this is the first year of the project this looks encouraging.

- What lessons have you learned from this year's work, and can you build this learning into future plans?

The fieldworkers will need more help in collection the numbers of plants required. We can accommodate this within the current project.

10. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum)

Due to the fact that Yayasan Sabah has assed the HVCF assessment and the writing of the FSC certification report to be put forward. The result is that this part of the Darwin project will be finished in 2006, the second year of the project rather than in its third year. The FSC certification will have a significant influence on the management of the natural forest in the YS concession area.

■ I agree for ECTF and the Darwin Secretariat to publish the content of this section

In this section you have the chance to let us know about outstanding achievements of your project over the year that you consider worth highlighting to ECTF and the Darwin Secretariat. This could relate to achievements already mentioned in this report, on which you would like to expand further, or achievements that were in addition to the ones planned and deserve particular attention e.g. in terms of best practice. The idea is to use this section for various promotion and dissemination purposes, including e.g. publication in the Defra Annual Report, Darwin promotion material, or on the Darwin website. As we will not be able to ask projects on an individual basis for their consent to publish the content of this section, please note the above agreement clause.

Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2005/2006

Project summary	Measurable Indicators	Progress and Achievements April 2005-Mar 2006	Actions required/planned for next period
<p>Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</p> <ul style="list-style-type: none"> • The conservation of biological diversity, • The sustainable use of its components, and • The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources 			
<p>Purpose (To build capacity in forest management companies to assess the plant diversity of commercial forest reserves & protect HCVF's through FSC certification</p>	<p>Forest management companies have the capacity to assess plant diversity, use this as a basis to identify HCVF's</p>	<p>Yayasan Sabah has assed the HVCF assessment and the writing of the FSC certification report to be put forward.</p>	<p>The FSC certification will need to have a significant influence on the management of the natural forest in the YS concession area.</p>
<p>Outputs</p>			
<p>Plant collections made and deposited at SFD & RBG Kew herbaria</p>	<p>Collections accessioned in SFD & RBG Kew herbaria</p>	<p>1000 specimens made</p>	<p>More collection need to be made</p>
<p>Checklist of plant diversity</p>	<p>Published as a field guide (printed & on-line)</p>	<p>Not done</p>	<p>Web-site will need to be published</p>
<p>Vegetation maps & habitat assessments of YS concession</p>	<p>Identification of areas of high plant diversity & used as a basis for assessing HCVF's</p>	<p>Done apart from vegetation maps</p>	<p>Vegetation map will need to be made</p>
<p>Series of scientific papers</p>	<p>Papers submitted to local & international journals</p>	<p>Not done, to early</p>	<p>Next year will still be to early</p>

SFD and YS staff trained in plant identification, habitat assessment & identification of HCVF's etc	30 staff trained via a series of workshops at key project stages	Done	Finish this part of project
Extension training for staff from other Malaysia forest management companies	30 staff trained via a series of workshops at key project stages	Done	Do next course

Note: Please do NOT expand rows to include activities since their completion and outcomes should be reported under the column on progress and achievements at output and purpose levels.