Darwin Initiative Annual Report

Darwin Project Information

Project Ref Number	14-016
Project Title	Assessing and conserving plant diversity in commercially managed tropical rainforests
Country(ies)	Malaysia
UK Contract Holder Institution	Royal Botanic Gardens, Kew
UK Partner Institution(s)	Royal Society, South east Asian Program
Host country Partner Institution(s)	Yayasan Sabah Group
Darwin Grant Value	£ 173,100
Start/End dates of Project	April 2005 to April 2009
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	April 2006 to April 2007 Second annual report
Project Leader Name	Rogier de Kok, 28 April 2006
Project website	http://lion.rbgkew.org.uk/science/directory/projects/DiversityForestsSaba.html
Author(s), date	Rogier de Kok, 19 April 2007

1. 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.

2. Project Partnerships

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) and Yayasan Sabah (YS). The project aims to reach these goals through training (both formal as informal) course in the following subjects

Plant identification: The second plant identification course as apart of this project was given in July 2006 at the Sandakan herbarium (SFD). 37 people attended the course including 15 people from various departments of the Sabah Forest Department (SFD), 10 people of various departments of Yayasan Sabah (YS), 6 staff members of the Royal Society, South East Asian section (Danum valley) and 5 people of WWF-Malaysia and 1 independent conservation workers.

The expect training for core staff members hired by the project in Kew was conducted in September 2006. Five core staff members hired by the project were trained by members of Kew South East Asian team and many other specialists at Kew in plant recognition, use of keys, both in book and web based forms and how to use herbaria collections in the identification progress. All collections made up to that moment by the project have now been identified by these staff members and have been incorporated into the herbarium.

Collecting in Imbak Canyon has started with a visit of the entire collecting team in 2006. As no housing has been build yet at the Imbak site, no resident collector is housed at Imbak valley. This has caused a delay in collecting at the site, and the situation will probably continuo for the duration of the project. We will compensate for this by organising more collecting expeditions to Imbak Canyon. The person employed by the project to work at the Imbak is momentarily based at Maliau Basin.

Habitat assessment: This phase of the project has now been completed, well before its original deadline, with the submission of the final version of the report in September 2006 (see appendix 1, ProForest final report and first annual report)

Identification of High Conservation Value Forests. This phase of the project has now been completed, well before it original deadline, with the submission of the final version of the report in September 2006 (see appendix 1, ProForest final report and first annual report)

Implementation of FSC certification.

The board of Yayasan Sabah has been presented with the final version of the report in September 2006. ProForest staff has conducted a desk-based review of the assessment and held meetings with senior Yayasan Sabah and Sabah Forest Department staff, in order to discuss the findings of the assessment and to discuss appropriate management implications. Furthermore, ProForest has assessed and discussed possible next steps, including strategies for Yayasan Sabah to proceed with further concession-level HCVF assessments. The Yayasan Sabah board has now committed it self to work with the Smartwood organisation of the Rainforest alliance to submit the FMU's 15 & 16 for FSC certification.

Project partnerships:

The Yayasan Sabah (YS) has gone through the first round of FSC certification, with the help of its UK project partners. The board of Yayasan Sabah has been presented with the final version of the report in September 2006 and meetings with senior Yayasan Sabah people have been held in order to discuss the findings and to discuss appropriate management implications. This work has enabled the Yayasan Sabah board to committed it self to FSC certification for at least part of its holding.

During the plant Identification course in 2006, 10 people of various departments of Yayasan Sabah (YS) and two staff members of YS were part of the expect training in Kew, in September 2006.

During the plant Identification course in 2006, 15 people from various departments of the Sabah Forest Department (SFD) have been trained. The course was held at the Sandakan Herbarium, using their specimens. The Herbarium database in Sandakan has been enhanced with 1,372 extra new entries. Unfortunally it was impossible for a staff member of Sandakan herbarium to visit Kew for the month expect plant identification training at Kew.

Other Collaborations:

During this project we have made contact with WWF-Sabah, which is going to start a major reforestation project in our project area. Some of their staff where trained during the second plant identification course in 2006 and we will include a number of WWF-Sabah staff members in the third course. The long term activities of WWF would guaranty that these people will stay in conservation work in Sabah.

Furthermore, there are plans to set up a number of new research plots ion the project area by a group of European Universities and Yayasan Sabah. The skills acquired during this project will be in great demand and would guaranty that the people with these skills will stay in conservation work in Sabah.

3. Project progress

3.1 Progress in carrying out project activities

1) **Databasing of existing specimens completed**

The databasing has not yet been completed; this is mainly due to the late start of the databasing in 2005. The databasing is on tract and will finish within the time span of the project. This year 1,372 new entries where added to the Sandakan herbarium database from the target areas.

2) **Habitat assessment & identification of HCVF's Phase 2**

This part of the project is finished

3) **Plant identification first follow-up course given**

The Course given at Sandakan in July 2006 and the expert course was given in Kew in September 2006.

4) **Second set of collections identified and deposited in Sandakan, FRIM, Singapore, Sarawak and Kew herbaria**

The two first set of collections identified and deposited in Sandakan and Kew herbaria, the third set is in transit to Kew. The first two sets have been named; during the expert identification course at Kew, and the information have been send to Sandakan.

5) **Production of web based plant checklist**

The data has been entered on the database, but due to problems with the server and the switch of professional IT Support at Danum valley. The database has not yet been put on the web. We are working towards a date in August 2007.

6) **Data gathered in 20 plots**

This work has become obsolete, due to the fact that the HCVF assessment has been done at the beginning of the project (at the request of Yayasan Sabah), rather then at the end of the project. This was reported on in the first annual report.

3.2 Progress towards Project Outputs

The main aim of the project is to work with Yayasan Sabah and the framework of Forest Stewardship Council certification (FSC) and through this process maintain a high biodiversity in the commercially forest of Sabah. This aim has been achieved when the board of Yayasan Sabah has been presented with the final version of the report in September 2006 and when they committed them selfs to work with the Smartwood organisation of the Rainforest Alliance to submit the FMUs 15 & 16 for FSC certification.

This second aim is to address the plant identification knowledge hiatus through a programme of training, research and institutional capacity building within the Sabah Forest Department, Yayasan Sabah and Yayasan Sabah. This is being achieved by a series of courses both in Sabah and in Kew. This part of the project is track.

3.3 Standard Output Measures

Table 1 Please expand (eg paste from application form or previous reports) and complete Table 1. Project Standard Output Measures

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	TOTAL
Establishe d codes						
8	Courses	4 weeks	4 weeks	4 weeks		12 weeks
9	HCVF assessments	2				2
10	Field guide				1	1
12b	Databased of plants from project area			1		1
14a	FSC assessment workshops	3	3	1		6
20	computer software, scientific equipment, books	£10250	500			£ 10750
New - Project specific measures						

In Table 2, provide full details of all publications and material produced over the last year that can be publicly accessed, eg title, name of publisher, contact details, cost. Mark (*) all publications and other material that you have included with this report.

Table 2 Publications

Type * (eg journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (eg contact address, website)	Cost £
Non	Non	Non	Non	Non

3.4 Progress towards the project purpose and outcomes

The project has achieved it main project purpose well before time and is now working towards its second purpose.

3.5 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

The main aim of the project is to work with Yayasan Sabah and the framework of Forest Stewardship Council certification (FSC) and through this process maintain a high biodiversity in the commercially forest of Sabah. This aim has been achieved when the board of Yayasan Sabah has been presented with the final version of the report in September 2006 and when they committed them self to work with the Smartwood organisation of the Rainforest alliance to submit the FMUs 15 & 16 for FSC certification.

4. Monitoring, evaluation and lessons

Most of the outputs are relatively easy to evaluate. As they consist of numbers of people trained, reposts written, number of collections made.

5. Actions taken in response to previous reviews (if applicable)

I have reported more in detail on the situation at Imbak Canyon, in relation to the lack of infrastructure there

6. Other comments on progress not covered elsewhere

none

7. Sustainability

During the coarse of the project a number off related other projects are initiated by various other parties, which would build on the progress made by this project (see project partnerships, Other Collaborations section). Kew will be involved with some of those projects and that again would enhance the sustainability of the projects outcomes.

8. Dissemination

The field guide will be published in Sabah and will be initially funded by the Project. Future updates will have to be based on a commercial basis.

9. Project Expenditure

Please expand and complete Table 3.

Table 3 Project expenditure <u>during the reporting period</u> (Defra Financial Year 01 April to 31 March)

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

10. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes

none

Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2006/07

Project summary	Measurable Indicators	Progress and Achievements April 2006 - March 2007	Actions required/planned for next period
Goal: *To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve* *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*		*(report on any contribution towards positive impact on biodiversity or positive changes in the conditions of human communities associated with biodiversity eg steps towards sustainable use or equitable sharing of costs or benefits)*	*(do not fill not applicable)*
Purpose (insert original project purpose statement)	(insert original purpose level indicators)	(report on progress towards achieving the project purpose, ie the sum of the outputs and assumptions)	(Highlight key actions planning for next period)
Output 1. (insert original outputs with activities relevant to that outputs in lines below. Activities relevant to more than one output should be cross-referenced rather than repeated)	(insert original output level indicators)	*(*report general progress and appropriateness of indicator*)*	
Activity 1.1 insert activities relevant to this out put		(report completed or progress on activities that contribute toward achieving this output), and what will be carried out in the next period	
Activity 1.2, etc			

Output 2. (insert original output)	(insert original output level indicators)	*(*report general progress and appropriateness of indicator*)*
Activity 2.1.		
Activity 2.2. etc		
Output 3. etc,		

Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Goal: To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve • the conservation of biological diversity, • the sustainable use of its components, and • the fair and equitable sharing of benefits arising out of the utilisation of genetic resources			
Purpose To build capacity in forest management companies to assess the plant diversity of commercial forest reserves & protect HCVF's through FSC certification	Forest management companies have the capacity to assess plant diversity, use this as a basis to identify HCVF's	Key problems in the implementation of FSC guidelines removed & more companies able to move towards certification	Forest management companies intend to implement the FSC certification scheme (information from personal communication with forest managers and from newspapers articles)
Outputs *Plant collections made and deposited at SFD & RBG Kew herbaria*	*Collections accessioned in SFD & RBG Kew herbaria*	*Collections accessioned in SFD & RBG Kew herbaria*	*Critically named collections required to improve botanical naming (esp. in non-commercial species)*
Checklist of plant diversity	*Published as a field guide (printed & on-line)*	*Field guide distributed & website on-line*	*Checklist is a key tool for assessing plant diversity & identifying HCVF's*
Vegetation maps & habitat assessments of YS concession	*Identification of areas of high plant diversity & used as a basis for assessing HCVF's*	*Reported to concession holders & incorporated into management strategies*	*Forest management companies incorporate findings as part of FSC certification process*
Series of scientific	*Papers submitted to local*	*Papers accepted for*	*Forest managers incorporate results*

papers	*& international journals*	*publication*	*in their work.*
SFD and YS staff trained in plant identification, habitat assessment & identification of HCVF's etc	*15 key staff trained within SFD & YS – & as trainers for subsequent workshops*	*SFD and YS staff contribute directly to FSC certification process, & training of other staff*	*Lack of capacity in SFD & YS to assess plant diversity & identify of HCVF's is removed as limiting factor in securing FSC certification for Malaysian forest*
Extension training for staff from other Malaysia forest management companies	*30 staff trained via a series of workshops at key project stages*	*Wider capability in Malaysia to implement FSC certification*	*General intent among forestry companies to move towards FSC certification*
Activities		*Activity milestones*	
Staff training component: - Plant identification & assessing plant diversity - Habitat assessment & identification of HCVF's		Years 1, 2 & 3: Training workshops (held in Sabah) for up to 20 participants per year Year 1, 2 & 3: Training in habitat assessment, identification of HCVF's & other aspects of FSC certification by ProForest (Oxford, UK)	
Collection/collation of plant specimens: - Collation & databasing of existing specimens held at SFD & RBG Kew herbaria - Targeted collection of new specimens		Year 1: Training in plant collecting & identification in Sabah & RBG Kew for core collecting staff Years 1, 2 & 3: Advanced plant identification training & botanical databasing for key SFD & YS staff at RBG Kew	
Production of plant checklist & interactive key: - Printed checklist - Web-based checklist & interactive identification key		Years 1, 2 & 3: Preliminary printed & web-based checklists produced each year Year 4: Final checklist published & completed web-based checklist on-line	
Assessment of plant diversity in YS concession: - Targeted collecting & collation of existing data from major primary forest conservation areas (Danum Valley, Maliau Basin, Imbak Valley etc.) - Non-permanent plots established within commercial forest reserves, including already logged areas		Years 1, 2 & 3: Targeted collecting & collation of plant specimens Years 2 & 3: Establishment of plots in commercial forest reserves Year 3: Data analysis	

Vegetation mapping of YS concession: - Interpretation of high-resolution of satellite images	Year 1: Basic vegetation mapping of YS concession
Habitat assessment & identification of HCVF's: - Based on plant diversity of YS commercial forest reserves, proximity to existing conservation areas etc	Year 3: Habitat assessment & identification of HCVF's

Annex 3 onwards – supplementary material (optional)

Checklist for submission

	Check
Is the report less than 5MB? If so, please email to Darwin-Projects@ectf-ed.org.uk putting the project number in the Subject line.	
Is your report more than 5MB? If so, please advise Darwin-Projects@ectf-ed.org.uk that the report will be send by post on CD, putting the project number in the Subject line.	
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	
Have you completed the Project Expenditure table?	
Do not include claim forms or communications for Defra with this report.	