

# Darwin Initiative Annual Report



To be completed with reference to the Reporting Guidance Notes for Project Leaders that this report will be about 10 pages in length, excluding annexes Submission deadline 30 April 2011

#### 1. Darwin Project Information

Project Ref Number	17-021
Project Title	Restoring Tropical Forests: a Practical Guide
Country(ies)	Thailand
UK Contract Holder Institution	Royal Botanic Gardens, Kew
Host country Partner Institution(s)	FORRU, Chiang Mai, Thailand
Other Partner Institution(s)	
Darwin Grant Value	£81,200
Start/End dates of Project	01 April, 2009 – 31 March, 2012
Reporting period (1 Apr 200x to 31	Annual Report number 2; 01 April, 2010 – 31 March, 2011
Mar 200y) and annual report number	
(1,2,3)	
Project Leader Name	Kate Hardwick
Project website	www.kew.org and www.forru.org
Author(s) and main contributors, date	Kate Hardwick, David Blakesley, Stephen Elliott

#### 2. Project Background

This project was designed to significantly strengthen the long term impact and legacy of two previous Darwin projects (162/11/23 and 14-010), by enabling the two manuals published on tropical forest restoration for biodiversity recovery (designed for use in Indochina) to be adapted and enhanced for wider use throughout the tropics.

There is now huge interest in restoring the world's tropical forest ecosystems for biodiversity recovery and for carbon storage. In any forest restoration project it is important that practices should be based on the best science available. Many tropical forest restoration projects are being hurriedly put together in anticipation of various schemes to mitigate global warming. To make a significant contribution to biodiversity conservation, these projects must be based on sound scientific methodology, which includes the conservation of biodiversity as one of the principle aims.

Chiang Mai University's Forest Restoration Research Unit (FORRU) has developed scientifically proven techniques – based on the Framework Species Method – to restore tropical forest ecosystems in Thailand (presented in the Darwin-funded manual "How to Plant a Forest") and it has also designed research protocols that can be used to develop effective restoration techniques for other tropical forest ecosystems in SE Asia (published in the Darwin-funded manual "Research for Restoring Tropical Forests"). The main objective of this project is to thoroughly rework this material into a third Darwin Manual or Guide, augmented with case studies from around the world, to produce a standard global generic text that will make a major contribution to the efforts of many tropical countries to restore their native forests, and hence improve their ability to meet their obligations under the CBD.

The authors of the guide are based in England and the Forest Restoration Research Unit, Chiang Mai, Thailand. Case studies are being undertaken by William Milliken and Martin Cheek of the Royal Botanic Gardens, Kew in lowland tropical evergreen forest, Brazil and the Bamenda Highlands, Cameroon respectively, by Torunn Stangeland of the Norwegian University of Life Sciences for *Albizia-Combretum* woodlands in Uganda and by Manon Vincelette of QIT Madagascar Minerals for littoral forest in SE Madagascar. Other case studies on Australia, Cambodia, and Indonesia have been compiled by the principle authors of the Guide.

#### 3. Project Partnerships

**Project partnerships**: This project is essentially a partnership between the Royal Botanic Gardens, Kew (RBG Kew) and Chiang Mai University's Forest Restoration Research Unit, in collaboration with Dr David Blakesley (Wildlife Landscapes) who was the UK Project Leader for two previous Darwin projects (162/11/23 and 14-010) upon which this project is based. In its second year, the project has continued to be led by Dr Kate Hardwick (RBG Kew), in partnership with Drs Elliott and Blakesley. At RBG Kew, information for case studies has been provided by Drs Martin Cheek, William Milliken and Paul Smith; information on seed handling has been provided by Dr Kate Gold; and publication of the Guide is being overseen by Kew's Head of Publications, Gina Fullerlove. Project finances are being administered by George Sarkis, as the original project accountants, Ruth Bartholomew, and then Andrew Garrod, have now left Kew. Otherwise there have been no changes to the management structure of the project over the reporting period. The co-authors have maintained close contact by telephone, email and Skype on a weekly, and sometimes daily basis, and the Head of Publishing has been kept informed of progress.

Other collaboration: as described in Section 2, the co-authors have worked with colleagues at RBG Kew, and several external projects to compile case studies for the guide. Maps of tropical forest distribution across the world have been produced in collaboration with Val Kapos at UNEP-WCMC and Peter Ashton. When the book is published, one of the distribution points will be CBD focal points in the host country and other countries targeted for distribution. At this stage, it is anticipated that the project will support institutions across the tropics to build their capacity to meet CBD commitments. This will be described in greater detail in the Final Annual Report, when the book has been published and distributed.

# 4. Project progress

#### 4.1 Progress in carrying out project activities

Output 1 Information gathering from projects around the world

All the case studies have been completed, with information gathered from Queensland's Wet Tropics World Heritage Site, Australia; the Harapan Rainforest Initiative, Sumatra; the Forest Restoration Research Unit, Cambodia; Mato Grosso, Brazil; Madena, Madagascar; Kaliro district, Uganda and the Bamenda Highlands, Cameroon. In year 2, visits were made to Cambodia by Dr Elliott (in conjunction with Darwin Project EIDPO026) using in-kind funding from RBG Kew.

#### Output 2 Publication of guide

The focus of our work in the second year has been to complete the draft manuscript, and to have it peer reviewed both externally and internally by Kew staff. In May 2010, lengthy discussions between the authors in the UK, Drs Hardwick and Blakesley, and Dr Elliott (visiting from FORRU-CMU), took place at a series of editorial meetings at Kew and other venues. Significant progress was made at these meetings, particularly relating to the case studies; the process for reviewing material already drafted; and the content of chapters to be drafted in the second year. Internal meetings have also taken place within Kew between Dr Hardwick and prospective authors of the case studies. In addition, a meeting was held in June 2010 with the Head of Kew Publishing to discuss the publication schedule for the book in more detail, including the logistics of design, translation and so on.

Work is currently underway (early April, 2011) to address any outstanding reviewer's comments, and to prepare the manuscript for handover to the publishers at the end of May 2011, following the final editorial meetings at Kew between Drs Hardwick, Blakesley and Elliott (scheduled for mid-May).

Output 3 Distribution and dissemination of the guide This will be undertaken in the final year of the project.

In summary, following the logical framework:

Output 1 Information gathering from projects around the world – complete

Output 2 Publication of guide - scheduled for the third year of the project and on schedule

Output 3 Distribution of guide - scheduled for the third year of the project

#### 4.2 Progress towards project outputs

Writing tasks scheduled for the second year took slightly longer than anticipated, and as a result, the handover of the final manuscript was delayed from April 2011 to late May, 2011. Discussions with the Head of Kew Publishing indicated that this would not affect the final publication schedule, providing this deadline is met. Consequently it is anticipated that all the outputs will still be achieved by the end of the third year of the project. The measurable indicators for Output 1 have been achieved over the first two years of the project, and this can be verified by consulting the case studies included in the final manuscript. The translation of the guide was rescheduled to take place in Year 3 rather than Year 2 on the advice of Gina Fullerlove - see Change Request Form sent 19 November 2010, with amended scheduled attached.

As indicated earlier, the three measurable indicators for Output 2 were not completed by the end of Year 2 as anticipated, but should be completed by the end of May 2011, representing a delay of two months. There have been only minor changes in assumptions, based on recommendations from Darwin's external consultation, provided by Patrick Hardcastle (reported in the First Annual Report).

#### 4.3 Standard Measures

Table 1 Project Standard Output Measures

Code No.  Established	Description	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Number planned for this reporting period	Total planned from application
6A	Number of people to receive other forms of education/training (which does not fall into categories 1-5 above)	3 FORRU- CMU staff (2 Thais + 1 British) trained in latest framework spp. methods and carbon markets in Australia.	8 FAO staff trained in the ANR techniques described in the book, providing feedback on book's methodolog y		11	Not specified	Not specified
7	Number of (ie different types - not volume - of material produced) training materials to be produced for use by host country	, , , ,				None	One guide
8	Number of weeks to be spent by UK project staff on project work in the host country	WM-2 MC-1	WM-1 PS-1		WM-3 MC-1 PS-1	None	WM-2 MC-2 PS-2
10	Number of individual field guides/manuals to be produced to assist work related to species identification, classification and recording				0	0	1 guide
11B	Number of papers to be submitted to peer reviewed journals	0	0		0	0	1 (if further funding available)
12A	Number of computer based databases to be established and handed over to host country	0	0		0	0	1

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Number planned for this reporting period	Total planned from application
15A	Number of national press releases in host country(ies)	0	0		0	0	1
15B	Number of local press releases in host country(ies)	0	0		0	0	1
15C	Number of national press releases in UK	0	0		0	0	1
17A	Number of dissemination networks to be established	0	0		0	0	3 (Kew website, FORRU website, Kew Publishing)
18A	Number of national TV programmes/features in host country(ies)	0	0		0	0	1
18D	Number of local TV programmes/features in UK	0	0		0	0	1
22	Number of permanent field plots to be established during the project and continued after Darwin funding has ceased						Unknown number of trials will be set up by practitioner s using the book
23	Value of resources raised from other sources (ie in addition to Darwin funding) for project work	c. £2,000 from Biotropica Australia Plc for FORRU member of staff	£3,500 from John Ellerman Foundation for KH salary				Unspecified
New – Project specific measures							

#### Table 2 Publications

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

# 4.4 Progress towards the project purpose and outcomes

The purpose of the project is to publish and distribute a global generic guide to facilitate tropical forest restoration for biodiversity recovery and thereby significantly strengthen the long term impact and legacy of two previous Darwin projects. Progress towards the outcome of this purpose is described in Sections 4.1 and 4.2. As far as we are aware, all the important purpose level assumptions and measurable indicators still hold true.

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

The project is unlikely to make a major impact on biodiversity until the publication of the global generic guide in 2012. However, after publication it is anticipated that the guide will facilitate restoration of forest ecosystems for biodiversity recovery in tropcial countries across the globe, thus making a very significant impact on tropical forest biodiversity.

### 5. Monitoring, evaluation and lessons

Monitoring and evaluation have primarily been achieved through peer review of book chapters, together with some useful comments made by the reviewer of the First Annual Report. All written material for the guide, including descriptions of the case studies was initially reviewed and edited by the other coauthors. This process frequently resulted in useful and detailed discussions between the authors. Revised versions of text were then peer reviewed both internally (by staff of RBG Kew) and externally. Lessons: the writing and review process has been relatively straightforward and effective, although it has taken longer than originally anticipated. With hindsight, we would have contacted reviewers earlier, to avoid the 2 month delay in handing over the manuscript to the publisher. One particularly challenging aspect of the guide has been to agree the nomenclature of tropical forest types across the globe, and to obtain accurate and up-to-date maps for these types.

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

**Process for selection of suitable case studies:** The case studies were chosen from around the world to illustrate projects at different stages of implementation of the framework species forest restoration methodology, and a range of opportunities where the method could be applied, once guidance is made available. These include Queensland, where the method was conceived; Thailand, where the method has been developed and applied to a range of different environments; Cambodia, where the Thai model for a Forest Restoration Research Unit is being implemented; and Brazil, where there are excellent opportunities for the method to be applied.

Monitoring and evaluation process to ensure consistency of case study information: as explained above, the case studies will be drawn from widely differing projects to illustrate different points, so the information included will vary accordingly. However, as noted by the reviewer, it is important to be consistent in the way that the information is handled and presented. Consequently, the case studies are being written and/or edited by Dr Hardwick to ensure a standard framework for all. Where appropriate, information will include: project background on forest type, nature of ownership, levels of degradation etc.; opportunities, approaches and methods for restoration; and results of any restoration carried out.

Indicate likelihood that potential framework tree species can be identified: the guide is being written on the assumption that framework species will be readily identifiable in the majority of tropical forest types, from the wettest lowland rainforests to dry tropical forests and higher altitude cloud forests. The characteristics of framework tree species are well known, but as the reviewer has recognised, the method has not been widely applied outside of SE Asia and Australia. In any given forest type, some research will be required to identify a full complement of framework tree species, using the guidance provided in the book.

# 7. Other comments on progress not covered elsewhere

No significant difficulties have been encountered so far, and the project was on schedule at the time of writing. The project is not believed to face any particular risks.

#### 8. Sustainability

The project has a lower profile in Thailand than earlier Darwin projects, because Thailand is not intended to be the major beneficiary of the generic global guide. Thailand already benefits from two Darwin Guides published in English and Thai. Nevertheless, the new guide, with its global perspective should be of considerable interest to forest restoration practitioners in Thailand. Significant efforts will be made to promote the new Guide in wide range of tropical countries, particularly in Africa and South America. This will be undertaken following publication in approximately nine months time.

The proposed initial print run of 4,000 copies will be distributed free of charge. If, as expected, there continues to be substantial interest, modern printing technology will enable subsequent smaller print runs to be made in direct response to demand. Furthermore, Kew is significantly increasing its restoration activities, with various fundraising initiatives to support this. As identifying Framework Species and developing protocols for using them is an important part of Kew's future restoration ecology programme, the web-based feedback will be of great relevance and Kew is likely to continue to fund it or seek further funding.

#### 9. Dissemination

No activities were undertaken this year.

# 10. Project Expenditure

Please expand and complete Table 3.

Table 3 Project expenditure <u>during the reporting period</u> (Defra Financial Year 1 April 2010 to 31 March 2011)

Item	Budget	Expenditure	Variance
Rent, rates, heating,			
overheads etc			
Office costs (eg postage,			
telephone, stationery)			
Travel and subsistence			
Printing			
Conferences, seminars, etc			
Capital items/equipment			
(specify)			
Others (line drawings)			
Salaries: Blakesley			
Salaries: Elliott			
Salaries: Suttathorn			
TOTAL			

Highlight any agreed changes to the budget and explain any variation in expenditure where this is +/-10% of the budget. Have these changes been discussed with and approved by LTS?

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

I agree for LTS and the Darwin Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here)

<sup>\*</sup> Change request form submitted on 19 November 2010 ("change-request - Guide 2\_2010"):

<sup>\*\*</sup> Change request form submitted on 28 Jan 2011 ("17-021\_change-request\_Guide\_28jan2011"):

<sup>\*\*\*</sup>As a result of both change requests, the total budget for 2010-11 was reduced from £29,175 to £22,644 and the budget for 2011-12 was correspondingly increased from £19,250 to £25,781.

Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2010/11\*

Project summary	Measurable Indicators	Progress and Achievements April 2010 - March 2011	Actions required/planned for next period	
Goal: Effective contribution in suppobjectives of the Convention on Biologonia Convention on Trade in Endangered Convention on the Conservation of related targets set by countries rich resources.	logical Diversity (CBD), the d Species (CITES), and the Migratory Species (CMS), as well as	Nothing to report at this stage	(do not fill not applicable)	
<b>Purpose</b> Publish and distribute a global generic guide to facilitate tropical forest restoration for biodiversity recovery and thereby significantly strengthen the long term impact and legacy of two previous Darwin projects	<ul> <li>Records of countries/ institutions in which guide is requested and distributed</li> <li>Number of countries in which methodology is adopted</li> <li>Demand for 2<sup>nd</sup> edition</li> </ul>	Progress essentially as described in Outputs 1 and 2. As far as we are aware, all the important purpose level assumptions and measurable indicators still hold true.	Key actions include completion and handover of the manuscript early in Year 3, copy editing, layout and design, translation into French and Spanish, publishing, book launch and distribution.	
Output 1. Information gathering from projects in partner countries, including lists of potential framework tree species for each site; and additional information sourced from the international literature and through other contacts.  • Network established and functioning Information gathered on case study sites, including provisional lists of framework tree species		Information collected from Indonesia, Cameroon, Brazil, Uganda, Australia, Cambodia and Madagascar has been incorporated into Case Study accounts. The Indicators are still appropriate for this Output.		
Activity 1.1. Visit/gather information from and South America.	n Australia, Indonesia, Cambodia, Africa	Visits and information gathering complete	е.	
Activity 1.2. International editorial meeting	ng at Kew	International meeting was held over several days at Kew in May 2010, and a further meeting will take place in May 2011, early in the third year of the project.		
Activity 1.3. Draft case studies		Case studies drafted and will be included in the manuscript handed over to the designer in May 2011.		
Output 2. Publication of 'Restoring Tropical Forests: Practical Guide'	<ul> <li>Peer review of manuscript by minimum of two external experts</li> <li>Feedback from experts within RBG Kew</li> <li>Manuscript ready for translation and publication by end Year 2</li> <li>Guide translated and published at the end of Year 3</li> </ul>	Drafting and reviewing the text of the gui causing the handover of the manuscript Indicators are still appropriate for this Ou		
Activity 2.1. Draft text of guide	•	All chapters drafted as planned.		

Activity 2.2. Internal and external peer re	view	Peer review ongoing through Year 2, with final comments received in the first few weeks of Year 3.
Activity 2.3. Translation		Year 3 – on schedule.
Activity 2.4. Layout and design of guide		Year 3 – on schedule.
Activity 2.5. Printing		Year 3 – on schedule.
Activity 2.6. Launch event		Year 3 – on schedule.
Output 3. Distribution and dissemination of guide in hard copy and electronically, including low graphics version	<ul> <li>Number of copies and location sent to</li> <li>Guide accessible on RBG Kew and FORRU websites</li> <li>Numbers and quality of web response forms completed</li> </ul>	Year 3. The Indicator is still appropriate for this Output.

<sup>\*</sup> Revised version of logframe incorporating amendments suggested by Darwin reviewer

Annex 2 Project's full current logframe\*

Project summary	Measurable Indicators	Means of verification	Important Assumptions			
Outputs (add or delete rows as necessary)						
1. Information gathering from projects in partner countries, including lists of potential framework tree species for each site; additional information sourced from the international literature and through other contacts	<ul> <li>Network established and functioning</li> <li>Information gathered on case study sites, including provisional lists of framework tree species</li> </ul>	<ul> <li>Reports on visits and case studies</li> <li>Quality and comprehensiveness of information received from partners</li> </ul>	<ul> <li>Participants in Australia, Indonesia, and selected case-study countries in Africa and Tropical America provide sufficient information and host visits of project staff</li> <li>Case study partners remain motivated and committed to trial the methodology on publication of the guide</li> </ul>			
2. Publication of 'Restoring Tropical Forests: Practical Guide'	<ul> <li>Peer review of manuscript by minimum of two external experts</li> <li>Feedback from experts within RBG Kew</li> <li>Manuscript ready for translation and publication by end Year 2</li> <li>Guide translated and published in June Year 3</li> </ul>	<ul> <li>Peer and internal reviews, presented to Darwin</li> <li>Manuscript completed by end of Year 2</li> <li>Guides published in three languages by June Year 3</li> </ul>	<ul> <li>Reviews do not bring up issues that require major time extension</li> <li>Book meets publication standards of Kew Publishing</li> </ul>			
3. Distribution and dissemination of the guide in hard copy and electronically, including low graphics version	<ul> <li>Number of copies distributed and location sent to</li> <li>Guide accessible on RBG Kew and FORRU websites</li> <li>Numbers and quality of web response forms completed</li> </ul>	<ul> <li>Data supplied by Kew Publishing and RBG Kew by end Year 3</li> <li>Reports from webmasters of hits, responses and downloads</li> <li>Analysis of completed forms</li> </ul>	<ul> <li>Expressed interest from regions other than SE Asia is maintained</li> <li>Kew delivers undertaking to maintain the websites and record and assess feedback post project</li> <li>Users of the book willing to record the results of their projects on Kew's web forms</li> </ul>			

### Activities (details in workplan)

- 1.1 Visit/gather information from Australia, Indonesia, Cameroon, Madagascar and Brazil
- 1.2 International editorial meeting at Kew
- 1.3 Draft case studies
- 2.1 Draft text of guide
- 2.2 Internal and external peer review
- 2.3 Translation
- 2.4 Layout & design guide
- 2.5 Printing
- 2.6 Launch event
- 3.1 Guide distributed
- 3.2 Guide published on web
- 3.3 Responses to web guide analysed continues post project

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Monitoring activities:			
We will liase closely with Kew Publishi	ing during the production stage to moni	tor progress. Upon publication, project st	taff will manage and monitor the free distribution
of the book while Kew Publishing will s	supply regular sales reports. Kew's IT	department will monitor web downloads a	and project staff will record web-based
feedback.			

<sup>\*</sup> Revised version of logframe incorporating amendments suggested by Darwin reviewer

# Annex 3 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

This may include outputs of the project, but need not necessarily include all project documentation. For example, the abstract of a conference would be adequate, as would be a summary of a thesis rather than the full document. If we feel that reviewing the full document would be useful, we will contact you again to ask for it to be submitted.

# Checklist for submission

	Check
Is the report less than 5MB? If so, please email to <a href="mailto:Darwin-Projects@Itsi.co.uk">Darwin-Projects@Itsi.co.uk</a> putting	<b>&gt;</b>
the project number in the Subject line.	
Is your report more than 5MB? If so, please advise <a href="mailto:Darwin-Projects@Itsi.co.uk">Darwin-Projects@Itsi.co.uk</a> that	
the report will be send by post on CD, putting the project number in the Subject line.	
Have you included means of verification? You need not submit every project	
document, but the main outputs and a selection of the others would strengthen the	
report.	
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 involved your partners in preparation of the report and named the main	<b>&gt;</b>
contributors	
Have you completed the Project Expenditure table fully?	<b>~</b>
Do not include claim forms or other communications with this report.	