

## *Darwin Initiative Annual Report*

### **Darwin Project Information**

Project Ref Number	14-010
Project Title	Facilitating forest restoration for biodiversity recovery in Indochina
Country(ies)	Thailand, China, Laos, Cambodia
UK Contract Holder Institution	East Malling Research
UK Partner Institution(s)	East Malling Research, Wildlife Landscapes
Host country Partner Institution(s)	Kunming Institute of Botany - ICRAF, China; Forest Research Centre, Laos; Forest and Wildlife Science Research Institute, Cambodia; Forest Restoration Research Unit, Thailand
Darwin Grant Value	£169,653
Start/End dates of Project	01 April 2005 to 31 March 2008
Reporting period and annual report number	01 April 2006 to 31 March 2007; Annual Report no. 2
Project Leader Name	Dr David Blakesley
Project website	<a href="http://www.forru.org">www.forru.org</a>
Author(s), date	D Blakesley, S Elliott, H Weyerheuser, N Sothea and S Ketphanh; 30 April 2007.

### **1. Project Background**

This project is located in Indochina, and includes partners in Thailand, China, Laos and Cambodia. It builds on a previous Darwin Initiative project carried out by the Forest Restoration Research Unit of Chiang Mai University (FORRU-CMU), northern Thailand, in collaboration with the same U.K. contractor, East Malling Research (EMR) and Wildlife Landscapes.

Since 1994, FORRU-CMU has adapted and tested the framework species method of forest restoration to successfully accelerate biodiversity recovery on degraded areas in the highlands of northern Thailand. The method involves planting 20-30 indigenous trees species, which grow quickly, shade out weeds and produce resources - especially fruit - which attract seed-dispersing wildlife. The planted trees restore forest ecosystem structure and functioning, whilst animals attracted to them bring in seeds of non-planted trees, leading to rapid biodiversity recovery.

In 2002, a Darwin Education Team was established to disseminate this original knowledge to local organisations in northern Thailand. The education team gained valuable experience in running workshops, extension visits and producing educational materials, for government officers and community groups, to encourage them to establish their own tree nurseries and start forest restoration projects. During this project, several organisations from neighbouring countries requested assistance from FORRU-CMU to replicate the unit's approach to forest restoration, and its resultant benefits for biodiversity recovery. Requests were received for technology transfer, training and the translation of FORRU-CMU's literature into their local languages, in order to select, propagate, plant and care for framework species indigenous to each country and adapt the framework species method to the various socio-economic conditions of each country.

Following initial contact with key organisations in China, Laos and Cambodia, the present Darwin project was formulated. It is providing a mechanism for training, information exchange and technology transfer that will enable key organisations involved in forestry and biodiversity conservation to adapt and develop the concept of framework forestry to suit the different conditions in three Indochinese countries.

Extensive national-level reforestation schemes are currently underway in China, Laos and Cambodia, mostly involving the establishment of monocultures of pines, eucalypts or a handful of other commercial tree species. Provision of new skills and knowledge to encourage development of a more "wildlife-friendly" approach to forestry would significantly increase biodiversity recovery in such reforestation projects, especially those within conservation areas. None of the partners are aware of any such project in their respective countries, and believe that this will be both an innovative and highly inspirational project in the participating countries.

## **2. Project Partnerships**

The lead institution for this project Darwin project is East Malling Research (EMR), working in collaboration with Wildlife Landscapes (founded by the Darwin Project Leader, Dr David Blakesley). This relationship works very effectively, with Wildlife Landscapes co-ordinating the project's many participants in 5 countries mostly via email. FORRU-CMU has run or helped to organize most of the project activities in SE Asia, by workshops and other meetings with the project partners.

The main problem of working with several developing countries simultaneously is the policy of grant payment in arrears. We have raised serious concerns over this issue in all previous reports, but it continues to cause difficulties in project activities and outputs. Our SE Asian partners do not have the financial reserves necessary to pay for project activities and await repayment later. We strongly urge Darwin to make payments in advance to such countries. We are fortunate that EMR have made several payments to partners from their own resources to enable them to undertake certain project activities.

In Cambodia, the partnership project (FORRU-Cambodia) is also working in partnership with the Community-Based Forest Gene Conservation project, formerly called the Cambodia Tree Seed Project. It works closely with various community forestry initiatives in Cambodia, focussing on the conservation of indigenous tree species, to ensure their sustainable management and equitable use. This partnership project has also been able to identify some target areas for FORRU-Cambodia's programme.

The project partnership with ICRAF (now the World Agroforestry Centre) deserves special mention here in terms of the extra technical and financial inputs provided to the project. The Darwin grant has helped tremendously to boost the technical skills of the Chinese partners but the present stage of development at the Tengchong nursery and field station would not have been possible without substantial funding provided by ICRAF-China. During the course of the project an additional 30,000 USD has been added to the Darwin project to build basic infrastructure, i.e. a small greenhouse, improve the building to host the small herbarium and building a cold storage for germination trials. Freezers, computers, camera's etc. have been funded and in collaboration with the Kunming Institute of Botany, Chinese Academy of Sciences, training and capacity building of local staff has been carried out in Kunming, and researchers from Kunming visited the field sites and helped with the taxonomy work in situ. To further facilitate forest restoration efforts ICRAF supported the Yunnan Forestry Vocational College to institutionalise a new unit on the same topic and to develop and include a new course on forest restoration into their curriculum

from 2007 onwards. For this course the English material of 'How to Plant a Forest' had to be adapted and translated into a text book for teaching. The college has set-up three more small nurseries for teaching their students at the college and at the college training site close to Kunming. In addition, in 2006 an area of land was used for enrichment planting with seedlings from their own nursery; germinated from seeds collected and in the first year of the project, again with a major funding input by ICRAF-China.

The in-country workshop held early March in Tengchong, China hosted researchers and practitioners from various national and international organisations for 4 days and resulted in a set of new project ideas and proposal drafts (see attached workshop report).

During the past year, researchers and forestry officials from Southwest China visited the field sites and colleagues from Tengchong presented their work at many meetings at provincial and national level. A paper is presently in print on work presented at an international symposium in Luang Prabang in Lao PDR. Colleagues from the food security working group, a consortium of NGOs and GOs from Myanmar went to visit some of the restoration field sites in 2006.

In mid 2007 ICRAF will further support training activities for local staff and will send another 5-8 officers from Southwest China to Chiang Mai for further training in plant collection, herbarium preparation and data base management and data analysis.

### **Other Collaborations:**

The project has attracted much interest and funding from other organizations in SE Asia, resulting in engagement of two additional Indochinese countries in similar project activities.

Funded by GTZ, an additional workshop, replicating the ones run for the partner countries, was run for Vietnamese foresters involved in restoration of Tum Dai National Park in N. Vietnam. This group also funded a draft translation of 'How to Plant a Forest' in Vietnamese, and arrangements are now being made to print it.

FORRU-CMU has also received requests for permission to print 'How to Plant a Forest' in Portuguese (for Brazil) and to use the book in Africa (for the "Plant a Billion Trees Project" of Nobel Laureate Wangari Maathai).

FORRU representatives were invited to teach at 2 workshops for the Meetha Foundation in Myanmar. Furthermore, a delegation from Myanmar visited the project in Thailand, hosted by the Regional Community Forestry Training Centre, Bangkok.

Representatives from WWF Malaysia and Vietnam (Hua University) visited the project last May.

FORRU co-hosted a meeting in Chiang Mai, organised by Biodiversity International (formerly IPGRI) in November on biodiversity in forest restoration.

FORRU-CMU was asked to provide advice for a wildlife corridor project (linking Thailand's Western Forest Complex with Kaeng Krachan National Park) being implemented by the Department of National Parks and Wildlife and funded by Asian Development Bank. Copies of 'How to Plant a Forest' were provided as a text for tree planting activities.

Several parts of 'How to Plant a Forest' were reworked by the Plant a Tree Today Foundation for use by children as part of the Foundation's School tree Nurseries Project.

### **Does the project have a link with the CBD focal point?**

This is an area which will be explored more fully in the final year of the project. However, FORRU-CMU staff recently contributed to a major workshop on improving planting stock for forest restoration projects throughout Thailand, organized by the Royal Forest Department (RFD) of Thailand. Copies of 'How to Plant a Forest' (in Thai) were distributed to all RFD nursery managers during the meeting.

The project staff at Tengchong are actively involved at provincial level and have participated in workshops on CBD issues in Yunnan and Sechuan. Draft copies of the Chinese translation of the Field Guide has been distributed on CD and is available on the website for download.

### 3. Project progress

#### 3.1 Progress in carrying out project activities

##### **Activity 2.1 Collation of information from FORRU educational material and workshop inputs. Draft scheduled for April 2007, publication by December 2007.**

This activity contributes to Output 2: Generic Manual on Establishing a Forest Restoration Research and Training Unit in three countries.

Very good progress has been made on the Manual in the second year of the project. The book comprises 6 chapters, and first drafts have been produced for each of these. Some have already been edited and a second draft produced. The first chapter has already been laid out and drafts are being exchanged between the authors as pdf files. Once second drafts have been produced for all the chapters, the material will be sent out for peer review. This is likely to take place early in the third year of the project, on schedule.

##### **Activity 4.1 One training workshop in each country – China, Laos and Cambodia – to focus on the application of techniques locally, and the gathering of information for the Field Guide and Implementation Plans**

This activity contributes to Output 4: Three workshops in China, Laos and Cambodia: training 75 individuals and developing implementation plans (proposals). A report of each of the workshops accompanies this Annual Report.

All three workshops took place in year 2. The core objectives of each workshop were to:

- Formulate a plan to establish a FORRU in the host country
- To work on drafting an implementation plan (proposal) to establish a Forest Restoration and Research Project (FORRU) in the host country
- Review and discuss the Darwin project publications
  - Field guide – “How to Plant a Forest” – drafted in local language for comments – was very well reviewed in the timeframe of each workshop, with many participants contributing.
  - Manual – “Research for restoring tropical forest ecosystems: a practical guide” an outline was distributed

Specific issues addressed by each workshop included:

1. Presentation of an overview of the forestry situation in the host country.
2. The history of forest rehabilitation in the host country
3. The research work of host(s).
4. Role of a FORRU in forest restoration
5. The need to have FORRU in the host country
6. FORRU project design in the host country

**The Laotian workshop** was held on July 03-07, 2006, at the Forest Research Centre (NAFRI) and Faculty of Forestry (NUoL), Sangthong district, Laos. The workshop was organized by the Forest Research Centre (FRC) under the National Agriculture and Forestry Research Institution (NAFRI) and conducted in Lao, Thai and English. Twenty seven participants attended the workshop, including three representatives from FORRU-CMU. The workshop continued to raise awareness of the Framework Species method (FWSP) amongst a wider range of stakeholders than those that could attend the workshops held the previous year at FORRU-CMU in Thailand. Progress was made on the implementation plan, and a field site was inspected, but found not to be suitable. However, the Laotians undertook additional work to find a better site afterwards.

**The Cambodian workshop** was held on October 09-13, 2006, at the Forestry Administration (FA), Department of Forestry, Kampong Thom Cantonment. It was organised by the Forestry Administration, under the department of Forestry, and conducted in English and Khmer. Thirty participants attended the workshop, including three representatives from FORRU-CMU and two from FRC, the Laotian partner. The workshop was successful, as evidenced by the participation and responses of the participants, and the progress made on drafting the implementation plan, and the inputs to the Field Guide and Manual.

There was a good feedback on the Khmer version of 'How to Plant a Forest'. A site for a potential FORRU was visited, but was not found to be suitable. Alternative sites are actively being sought by the Cambodian partners. The workshop also provided an extra opportunity for discussions with the Laotian partners on progress with translation and adaptation of their version of the Field Guide, Implementation Plans etc. A full report on the Cambodia workshop accompanies this Annual Report.

**The workshop in China**, which was postponed until early 2007, to enable all participants invited to attend, was held on March 13-15, 2007, at the Sightseeing Hotel, Tengchong, Yunnan. It was organised by the Yunnan Forestry Technological College, Tengchong Administrative Bureau of Goaligaoshang Mountains National Nature Reserve and the World Agroforestry Centre, and conducted in Chinese and English. Fifty six participants attended the workshop, from 20 government and NGOs, including three representatives from FORRU-CMU. Whilst all the workshops were deemed to have been successful, the workshop in China was outstanding in terms of the enthusiasm and commitment of the participants to the objectives of the Darwin project, and the considerable progress demonstrated was far greater than the Project Leaders believed possible within the timeframe of the Darwin project.

#### **Activity 5.1 Collate information from in-country workshops [on implementation plans], drafts complete by Dec 07.**

This activity contributes to Output 5: Plans to implement model forest restoration programmes in each country [China, Laos and Cambodia].

Partners in Laos, China and Cambodia have been working on the implementation plans, and these have been discussed in formal sessions at each country workshop. Draft implementation plans are on schedule for completion by December of year 3.

Further development and exchange of ideas on implementation plans from all Indochinese countries will take place at round table discussions in Laos or Cambodia in July – (this is an additional activity not in the original project schedule).

#### **Activity 7.1 Collation of information from FORRU research databases, educational material and workshop inputs. All Field Guides published by March 2007.**

This activity contributes to Output 7: Field guides on 'How to Plant a Forest' published in China, Laos and Cambodia

Whilst substantial progress has been made on this activity, the three Field Guides will not be available by the end of March 2007. The task of translation, together with editing the original text, and the addition of new material relevant to each country proved more onerous than was originally anticipated. This has delayed the publication progress a little. However, we are pleased to report that the Chinese version is in press. The Cambodian version has been delayed slightly due to a number of factors, including the change in the project leader; difficulties encountered in translation of some of the technical terms; and provision of some illustrations. The Laotian version has been finalised and is currently in press.

### **3.2 Progress towards Project Outputs**

#### **Output 2: Generic Manual on Establishing a Forest Restoration Research and Training Unit in three countries.**

The manual is on schedule for completion of the English version in July 2007, when it will be passed to the partners in China, Laos and Cambodia for translation. In view of the delays to publishing the Field Guide, we expect that the Manuals will be published at the end of year 3, rather than in November as originally scheduled. The output level indicators comprise the peer review of the Manual, which will take place early in year 3, and publication, which will also take place in year 3. The output level assumptions have been met for this objective.

#### **Output 4: Three workshops in China, Laos and Cambodia: training 75 individuals and developing implementation plans (proposals).**

The three workshops all took place in the second year, as scheduled. Each workshop was very successful, and achieved its objectives. Verification of a successful outcome was measured by the number of participants, the organisations which they represented, and the outputs of the workshops in

terms of draft implementation plans, discussion and input to the Field Guides and Manual, and the completion of workshop evaluation questionnaires. The output level assumptions have been met for this objective.

### **Output 5: Plans to implement model forest restoration programmes in each country [China, Laos and Cambodia].**

The preparation of the implementation plans is on schedule for completion towards the end of year 3. China is a special case, because they have already begun to implement a FORRU research program with support from ICRAF (see Section 6). Consequently, the Chinese implementation plan will address advancement of the work already underway in Yunan and with additional proposals to initiate FORRUs in other areas (namely Sichuan (for conservation of panda habitat) and in Jiangxi).

Verification of a successful outcome was measured by the number of participants who contributed to the workshop discussions on the implementation plans, and the organisations which they represented. The output level assumptions have been met for this objective.

In Cambodia, Siem Reap province has been selected as the target area for the field guides because the forest in this area is degraded and it is suffering heavy encroachment and clearance of forest land for ownership. Significantly, the Siem Reap site is located close to Kulen National Park and there is one Forest Administration nursery nearby the area. However, the nursery is not well equipped and is under a poor operation. More importantly, the area has been selected because it has easy access, fertile soil and was formerly evergreen forest. In addition, the area has abundant natural resources in the Kulen National Park, which will help to restore the biodiversity resources of the area.

### **Output 7 Field guides on ‘How to Plant a Forest’ published in China, Laos and Cambodia**

Please see Activity 7.1 above

## **3.3 Standard Output Measures**

**Table 1 Project Standard Output Measures**

Code No.	Description	Year 2 Total
Established codes		
6A, 6B, 14A	Workshop in Laos	One workshop for 27 people
8	Thai project leader visits UK 1 x 1 week	Visit completed in May 2006
7	Draft Field Guide Laos peer review	Reviewed by University and Ministry staff during workshop and afterwards
15A/C	Press release in each host countries	Press present at the workshop in China; report in Yunnan Daily and Tengchong Newspaper on March 15
18A/C	Radio. TV coverage in host countries	National V crew present at the workshop in Laos. TV report from China workshop broadcast on March 23 on Yunnan TV and also Tengchong TV. Broadcast on Yunnan Radio Station on March 15.
6A, 6B, 14 A	Workshop in China	One workshop for 56 people
	6 month Darwin report	One report complete
16A, 16B	Newsletter (100 copies) distributed	One in June 2006 and next one

		drafted March 2007
7	Publish Field Guide in China	In press
6A, 6B, 14A	Workshop in Cambodia	One workshop for 30 people
7	Publish Field Guide in Laos	In press
7	Draft Field Guide in Cambodia peer review	Reviewed by local experts
	Workshop evaluation reports	Three evaluation exercise undertaken as part of the in country workshops
7	Publish Field Guide in Cambodia	Close to completion
New -Project specific measures	None	

**Table 2 Publications**

Type *	Detail	Publishers	Available from	Cost
(eg journals, manual, CDs)	(title, author, year)	(name, city)	(eg contact address, website)	£
Oral presentation at Symposium on Biodiversity Management	Managing Forest Succession for Biodiversity Recovery: balancing ecological and economic needs. S Elliott and D Blakesley. 2007	King Mongkut's University of Technology		
Oral presentation at the symposium in Lao PDR, paper to be published May 2007	Farm forestry & buffer zone enhancement in Southwest China Horst Weyerhaeuser (ICRAF-China), Zhou Zhemei (Baoshan For. Dep.), Wu Xinfong (YFVS), Laura Ediger (ICRAF-China), Chen Huafang (ICRAF-China), ICRAF-China, Luang Prabang, SSLWM 2006, December 12-15, 2006			

### 3.4 Progress towards the project purpose and outcomes

The main purpose of this project is to facilitate restoration of forest ecosystems for biodiversity recovery in China, Laos and Cambodia through transfer of the framework species method to key forestry stakeholders. The project is assisting these countries to set up Forest Restoration Research Units – which include nurseries and experimental plots to adapt the technique to local ecological and socio-economic conditions – to demonstrate forest restoration to local people. The assumptions outlined in the logframe still hold true: biodiversity conservation remains a priority in reforestation policies of the three countries; there has been considerable demand for expertise and training, which has surpassed all our expectations (particularly in China); the enthusiasm of all partners has been great; and FORRU-CMU continues to receive core funding from other organisations for its core activities. The indicators (means of verification) listed in the logframe remain adequate for measuring outcomes.

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

This aspect of the project will be considered more fully in the final report. However, in China, very good progress has already been made in: capacity building at local level, training course and new curriculum at college level; institutionalising of FORRU approach in situ and at research institutions; generating very valuable information on seed germination of native tree species for future use in mixed forest plantations.

For FORRU-Cambodia, understanding and awareness of biodiversity issues, sustainable use or equitable sharing of biodiversity benefits have already been improved through the participation of stakeholders in the workshop and the draft of field guide and manual.

#### **4. Monitoring, evaluation and lessons**

This information is presented fully in sections 3.1 – 3.4. The project builds on the capacity of each country to recover biodiversity in the future by rebuilding wildlife habitats. It is just one of many activities in each country that are building momentum towards greater understanding and conservation of biodiversity. The benefits of the project will be realized well into the future. Methods include peer review of the Field Guides and the Manual, reporting of workshop discussions on publications and the Implementation Plans (see Workshop Reports attached) and the results of workshop questionnaires.

#### **5. Actions taken in response to previous reviews**

Responses of the Project Leaders to the First Annual Report are as follows:

1. The reviewer suggested that comments relating to impact and achievements appear to be made in the absence of recognition of wider initiatives such as IUCN, WWF and IUFRO. Our project has in fact enjoyed excellent co-operation with the WWF-IUCN Forest Landscape Restoration Initiative (FLR). FORRU contributed to an international FLR meeting in Chiang Mai in 2005, and has supplied books and other information for the FLR website. Our work is described a number of times in the WWF book on 'Forest Restoration in Landscapes – Beyond Planting Trees'. We have also joined the IUCN Commission on Ecosystem Management under the thematic area of 'Ecosystem Restoration'. With respect to ITTO, FORRU hosted an international conference on forest restoration, in Chiang Mai in 2000, sponsored by ITTO. During this meeting a Research Agenda was prepared for ITTO on the restoration of degraded forest lands. FORRU is still advocating, and addressing this agenda. The Project Leaders have contacted the NGO 'Concern', but their representatives declined to join the workshop in Phnom Penh.

2. With respect to accounting, we are improving our 'within-project' accounting procedure by requesting that all partners supply detailed accounts to EMR on a regular basis. However, we should point out that the main reason why the budget and expenditure agree so closely, is that partners are spending more than the budget allocated.

3. The reviewer suggested a logframe which was written more succinctly. We have studied the logframe, and feel that the activities and outputs are very clearly stated. If they were not descriptive, or presented in summary form, we believe that it would be more difficult to interpret. With respect to the overall purpose – we still feel that the summary is not too descriptive, and clearly states the purpose of the project, and that the measurable indicators listed, ie

- Training provided to key stakeholders in China, Laos and Cambodia
- Manual and Field Guide adapted and published in each country
- Implementation Plans complete in each country
- Strategy to set up FORRUs in place being implemented

will allow the 'purpose level' of the project to be properly monitored.

4. The reviewer asks whether it would be beneficial to the project to include demonstration plots and scientific publications to increase the impact of the project. Such ideas were not included in the original project plan, so to instigate them now would require considerable additional funding, which we do not have. Furthermore, FORRU-Thailand has a wealth of publications and an ongoing programme for planting demonstration plots. Following the annual review, we are now putting more papers onto our website as downloadable pdfs. The Chinese partners have already instigated a programme of tree planting over and above the work programme of the current Darwin project, which is described elsewhere in this report.

5. The reviewer states that the project should show that it is aware of the latest international initiatives that are taking place on forest restoration. We can assure the reviewer that we are aware of them, and in



many cases, actively involved (see point 1 above). In addition, FORRU-CMU has been invited to present at International Conference on Forest Landscape Restoration, to be held May 14-16, 2007 in Seoul, South Korea, with funding support provided by IUCN.

## **6. Other comments on progress not covered elsewhere**

**Progress made by the Chinese partner has been outstanding, and it is the view of the UK Project Leader that this represents an excellent example of the catalytic effect that a Darwin project can have, both in terms of the physical achievements and the attraction of additional funding.**

The Darwin workshop which took place in China was co-funded by ICRAF, enabling a much larger event to be held. A senior figure from the State Forest Agency in Beijing attended the whole workshop, which is locally very significant. Local TV also attended for two days, together with representatives from the press. After formal presentations, the participants visited Goaligaoshang NNR. Here, work on implementing the framework species method is already underway.

It was originally envisaged that this work would not start before the end of the Darwin project! This work includes taxonomy and phenology studies, seed storage, nursery experiments and experimental planting plots on a range of native species, has been supported by the Kunming Institute of Botany and ICRAF. The view of the Thai project leader who attended the workshop was that the technology transfer in year 1 of the Darwin project had been very successful, and he was pleased to see the techniques being applied in China. This clearly indicates that the forestry officials who attended the first Darwin workshop in Chiang Mai passed on most of the information which they learnt to local workers. However, as a further supplement to the Darwin activities, the staff of the nursery will be sent to FORRU-CMU in year 3 of the Darwin programme for further training in the framework species methodology.

In addition to the work in Goaligaoshang NNR, similar projects are planned in the ADB corridor project in SE Yunnan, which links protected areas; Panda corridors in Sichuan; and a major planting initiative in severely degraded land in Jiangxi.

Consequently, the outputs for the Chinese partners will need to be revised slightly in the third year, as they are already implementing the framework species method, with the necessary funding. It is envisaged that the official 'Darwin Implementation Plan for China' will focus on the development of these pilot projects described above.

## **7. Sustainability**

**Cambodia:** the project coordinator together with Forestry Administration has made great efforts to promote the work. These efforts can be described as the following:

- The project staff attended a several additional workshops in Cambodia, including the Darwin workshop
- Coordinated and worked with experienced FA officials to translate and verify the Khmer manual.
- Significant efforts have been to get support and permission from head of FA for the publication of the manual.

It is obvious that the publication of the Field Guide in Khmer is very important for increasing interest and capacity for biodiversity restoration in Cambodia. Capacity and knowledge has been already increased among Cambodian project staff following the international workshop and discussions.

**China:** the profile of the project in China has far exceeded expectations, and this has been described in detail elsewhere in this report. One consequence of this is a clear increase in demand for help with biodiversity conservation, for example through local capacity building, training courses and new curricula at college level, and institutionalising of the FORRU approach in situ and at research institutions.

## **8. Dissemination**

This has been covered in detail elsewhere. However, as awareness of the Darwin Project and its outputs has spread in Laos, FRC have received requests from various projects (including WWF-Laos, ITTO and the 'Sustainable Forest and Rural Development Project' (SUFORD)) for advice on forest restoration. The knowledge gained from FORRU-CMU is being disseminated to these Projects now, for example at a recent workshop in Laos in December 2006.

## 9. Project Expenditure

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

## 10. OPTIONAL: Outstanding achievements of your project during the reporting period

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

Here we have repeated the information provided in Section 6, because we believe that it constitutes an outstanding achievement on the part of the Chinese partner, with the full support of the Thai partner.

Progress made by the Chinese partner has been outstanding, and it is the view of the UK Project Leader that this represents an excellent example of the catalytic effect that a Darwin project can have, both in terms of the physical achievements of the work and the attraction of additional funding.

The Darwin workshop which took place in China was co-funded by ICRAF, enabling a much larger event to be held. A senior figure from the State Forest Agency in Beijing attended for the whole workshop, which is significant. Local TV also attended for two days, together with representatives from the press. After formal presentations, the participants visited Goaligaoshang NNR. Here, work on implementing the framework species method is already underway.

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Consequently, the outputs for the Chinese partners will need to be revised slightly in the third year, as they are already implementing the framework species method, with the necessary funding. It is envisaged that the official 'Darwin Implementation Plan for China' will focus on the development of these pilot projects described above.

## 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
<p><b>Goal:</b> <i>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</i></p> <p><i>The conservation of biological diversity,</i></p> <p><i>The sustainable use of its components, and</i></p> <p><i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i></p>		<p><i>(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)</i></p>	<p><i>(do not fill not applicable)</i></p>
<p>Purpose: To facilitate restoration of forest ecosystems for biodiversity recovery in China, Laos and Cambodia through transfer of the framework species method to key forestry stakeholders. This project will assist these countries to design research tree nurseries and experimental plots to adapt the technique to local ecological and socio-economic conditions and demonstrate it to local people.</p>	<ul style="list-style-type: none"> <li>- Training provided to key stakeholders in China, Laos and Cambodia</li> <li>- Manual and Field Guide adapted and published in each country</li> <li>- Implementation Plans complete in each country</li> <li>- Strategy to set up FORRUs in place being implemented</li> </ul>	<p>Progress on achieving the outputs described below has been generally very good, and in some areas it has surpassed expectation, delivering far more than was originally anticipated (see main text concerning activities in China). The output assumptions have so far been fully met, including participation, motivation, the importance of biodiversity conservation and the financial stability of FORRU-CMU. The exit strategy will be tested late in year 3, during and following the final workshop. However, the impact in China already equates to what we would have considered a success in terms of an exit strategy following completion of the Darwin project.</p>	<p>(Highlight key actions planning for next period)</p> <p>Publication of the 3 Field Guides early in year 3 (rescheduled from end year 2)</p> <p>Publication of Manuals</p> <p>Workshops</p> <p>Implementation plans</p>

<p><b>Output 1.</b> A forest biodiversity restoration network within each country</p>	<p>Network established in year 1</p>	<p>Achieved and reported in Year 1</p>
<p><b>Activity 1.1</b> Collate information on stake holders that would be involved in establishing and managing a forest restoration research unit, and establish network by Mar 06</p>		<p>Achieved and reported in Year 1</p>
<p><b>Output 2.</b> Generic Manual on Establishing a Forest Restoration Research and Training Unit in three countries</p>	<p>Peer review of Manual; publication in year 3</p>	<p>Means of verification will centre on peer review feedback (year 3) and published reviews after completion of the project; copies will be sent to Darwin. We believe this to be an appropriate indicator</p>
<p><b>Activity 2.1</b> Collation of information from FORRU educational material and workshop inputs. Draft manual produced by April 07, publication by December 07.</p>		<p>Good progress has been achieved with the Manual in year 2, and a first draft of each chapter has been completed. Work is currently focussed on editing and revising the draft before copies are sent out for peer review (year 3). The Manual is on schedule.</p>
<p><b>Output 3.</b> Three workshops in Thailand training 45 key personnel from China, Laos and Cambodia in forest restoration, and planning adaptation of generic manual to local conditions</p>	<p>Workshops held, participation target reached, feedback from questionnaires</p>	<p>Achieved and reported in Year 1</p>

<b>Activity 3.1</b> Yr 1: Three training workshops in Thailand to assist partners to adapt the Framework Species technique to local ecological and socio-economic conditions		Achieved and reported in Year 1
<b>Output 4.</b> Three workshops in China, Laos and Cambodia; training 75 individuals and developing proposals	Workshops held, participation target reached, feedback from questionnaires	Reports on the workshops including participant lists are included in the second year report package. We believe this to be an appropriate indicator.
<b>Activity 4.1</b> Yr 2: One training workshop in China, Laos and Cambodia focussing on application of techniques locally, and gather information for Field Guide and Implementation Plans  <b>Activity 4.2</b> Yr3 Mini-workshop for all participants to work on implementation plans		<b>Activity 4.1</b> All three workshops took place in year 2, with the added bonus that some workshops were attended by more than two partners.  <b>Activity 4.2</b> The mini workshop was added to the programme during the first year of the project. This will take place in July 2007, probably in Laos.
<b>Output 5.</b> Plans to implement model forest restoration programmes in each country	- Draft implementation plans reviewed at joint workshop early year 3  - 3 implementation plans completed end year 3	The reviews of the implementation plans at the in country workshops have worked well. Plans are currently being drafted, and are on schedule; we believe that this is an appropriate indicator or progress
<b>Activity 5.1</b> Collate information from in-country workshops, drafts complete by Dec 07		Partners in Laos, China and Cambodia have been working on the implementation plans, and these have been discussed in formal sessions at each in country workshop. Draft implementation plans are on schedule for completion by December of year 3.

<p><b>Output 6.</b> One joint implementation workshop</p>	<p>Implementation workshop Jan 2008 (year 3)</p>	<p>This activity will start early in the final year. We believe that the indicators will be appropriate for this activity.</p>
<p><b>Activity 6.1</b> Plans presented at Implementation workshop in Thailand, Jan 08.</p> <p><b>Activity 6.2</b> Workshop evaluation produced one month after final workshop</p>		<p>These activities will take place towards the end of the project in January 2008. Early in year 3 we will plan the implementation workshop, and send out invitations to interested parties</p>
<p><b>Output 7.</b> Field guides on How to Plant a Forest in each country respectively</p>	<p>Field guides published at end of year 2</p>	<p>General progress has been good, but not as rapid as expected due to the complex nature of the task. The indicators will be appropriate for this activity.</p>
<p><b>Activity 7.1</b> Collation of information from FORRU research databases, educational material and workshop inputs. All Field Guides published by Mar 07</p>		<p>Whilst substantial progress has been made on this output and activity, publication will not be achieved on schedule. Nevertheless, progress has been considerable, and the vast majority of the text in each country has been amended and translated. It is now expected that Field Guides will be published slightly later in 2007.</p>



## Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p>Goal:</p> <p>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</p>			
<p><b>To facilitate restoration of forest ecosystems for biodiversity recovery in China, Laos and Cambodia through technology transfer to key forestry stakeholders. This project will assist these countries to</b></p>	<ul style="list-style-type: none"> <li>- Training provided to key stakeholders in China, Laos and Cambodia</li> <li>- Manual and Field Guide adapted and published in each country</li> <li>- Implementation Plans complete in each country</li> <li>- strategy to set up FORRUs in place being implemented</li> </ul>	<ul style="list-style-type: none"> <li>- Local networks established in each country</li> <li>- Manual and Field Guides published and presented to Darwin</li> <li>- Workshop evaluations submitted to Darwin</li> <li>- Evaluation of uptake through final participatory workshop</li> <li>- Annual and 6 month Darwin</li> </ul>	<ul style="list-style-type: none"> <li>- Biodiversity conservation remains a priority in reforestation policies in participating countries.</li> <li>- Local demand for expertise and training</li> <li>- Enthusiasm will enable project participants to follow through with project proposals</li> <li>- FORRU- Thailand continues to receive core funding for its other facilities</li> </ul>

<p><b>design research tree nurseries and experimental plots to adapt the technique to local ecological and socio-economic conditions and demonstrate it to local people.</b></p>		<p>reports</p>	
<p>Outputs</p> <ul style="list-style-type: none"> <li>- forest biodiversity restoration network within each country</li> <li>- generic Manual on Establishing a Forest Restoration Research and Training Unit in 4 countries</li> <li>- three workshops in Thailand training 45 key personnel from China, Laos and Cambodia in forest restoration, and planning adaptation</li> </ul>	<ul style="list-style-type: none"> <li>- network established in year 1</li> <li>- peer review of Manual; publication in year 3</li> <li>- workshops held, participation target reached, feedback from questionnaires, years 2 and 3</li> <li>- field guides published at end of year 2</li> <li>- draft implementation plans reviewed at</li> </ul>	<ul style="list-style-type: none"> <li>- list of participants</li> <li>- published reviews and feedback on Manual; copies sent to Darwin</li> <li>- participant list for workshops</li> <li>- report on workshop feedback questionnaires sent to Darwin</li> <li>- Field Guides sent to Darwin</li> <li>- three implementation plans sent to Darwin</li> </ul>	<ul style="list-style-type: none"> <li>- Local participants will provide sufficient information to enable the generic template guide to be adapted to local environment and conditions – they need to be paid to do so</li> <li>- Motivation and commitment of participants in China, Laos and Cambodia remains high, and is sustainable</li> <li>- Exit strategy relying on other organisations to fund the project proposals is successful</li> </ul>

<p>of generic manual to local conditions</p> <ul style="list-style-type: none"> <li>- three workshops in China, Laos and Cambodia training 75 individuals; developing proposals</li> <li>- plans to implement model forest restoration programmes in each country</li> <li>- one joint implementation workshop</li> <li>- field guides on How to Plant a Forest in each country respectively</li> </ul>	<p>joint workshop early year 3</p> <ul style="list-style-type: none"> <li>- 3 implementation plans completed in year</li> <li>- implementation workshop late year 3</li> </ul>	<ul style="list-style-type: none"> <li>- independently reviewed Darwin Initiative reports</li> </ul>	
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<p>Activities</p>	<p>Activity Milestones (Summary of Project Implementation Timetable)</p>
<p>1. Networks</p>	<p>1. Collate information on stake holders that would be involved in establishing and managing a forest restoration research unit, and establish network by Mar 06</p>
<p>2. Manual</p>	<p>2. Collation of information from FORRU educational material and workshop inputs. Draft manual produced by April 07, publication by December 07.</p>
<p>3. Workshops</p>	<p>3. Yr 1: Three training workshops in Thailand to assist partners to adapt the Framework Species technique to local ecological and socio-economic conditions; Yr 2: One training workshop in China, Laos and Cambodia focussing on application of techniques locally, and gather information for Field Guide and Implementation Plans; Yr3 Workshop for all participants to work on implementation plans; Yr. 3 Implementation workshop in Thailand (Jan 08); Workshop evaluation produced one month after final workshop</p>
<p></p>	<p>4. Collate information from in-country workshops, drafts complete by Dec 07; plans presented at workshop Jan 08.</p>
<p></p>	<p>5. Collation of information from FORRU research databases, educational material and workshop inputs. All Field Guides published by Mar 07,</p>
<p></p>	<p>6. radio/TV broadcasts in yr 2 and 3; press releases in yr 2 and 3; newsletter in Oct each year; 2 publications in 06/07; 3 Implementation Plans and Implementation Workshop in Jan 08.</p>
<p>20</p>	<p></p>
<p>Annual Report template with notes 2007</p>	<p></p>
<p>4. Implementation plans</p>	<p></p>



**Annex 3 onwards – supplementary material (optional)**

### ***Checklist for submission***

	Check
<b>Is the report less than 5MB?</b> If so, please email to <a href="mailto:Darwin-Projects@ectf-ed.org.uk">Darwin-Projects@ectf-ed.org.uk</a> putting the project number in the Subject line.	
<b>Is your report more than 5MB?</b> If so, please advise <a href="mailto:Darwin-Projects@ectf-ed.org.uk">Darwin-Projects@ectf-ed.org.uk</a> that the report will be send by post on CD, putting the project number in the Subject line.	
<b>Do you have hard copies of material you want to submit with the report?</b> 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.	