

# Legacy of DI projects in forest biodiversity Indonesia and Sabah, Malaysia

P D Hardcastle 19 February 2007

#### What is Legacy?

- Something of value that is passed on to others
  - Tangible protected area, publications, etc.
  - Intangible skills, knowledge, attitudes, etc.
- How can it be measured or assessed?
- How long does it last?
- Need to think within the scope of Darwin Initiative
  - Improved biodiversity conservation
  - Sustainable use of its components
  - Fair and equitable sharing of benefits

#### What is Evaluation of Closed Projects?

- Defined system of looking at achievements
- Structure of ECP report:
  - Relevance well conceived?
  - Efficiency use of inputs?
  - Effectiveness did it achieve its objectives?
  - Impact what happened as a result of the project?
  - Sustainability will the changes be continued?
- Legacy is an overall conclusion on the impact and sustainability of the project



February 2007

#### **DI Projects in Indonesia**

#### **Closed Projects**

- 4-068 Botanic Garden Biodiversity Database
- 5-127 Wildlife and rattan Trade in North Sulawesi
- 6-166 Forestry Curriculum for Conservation
- 7-135 Biodiversity of Peatswamp Forest, Kalimantan
- 9-012 Conservation of Paguyaman Forest, Sulawesi Current Projects
- 13-028 Nantu NP, Sulawesi
- 14-031 Market led conservation of song birds
- 14-037 Community conservation of coral reefs

### 4-068 - Botanic Garden Biodiversity Database

- Completed 1997
- Successfully established computerised record system
- System still in use and contact maintained recent visit by the computer consultant to assist with transfer to a new database system for zoological, botanical and geological specimens at LIPI

Good legacy, utilised by host country, adapted and developed

### 6-166 - Forestry Curriculum for Conservation

- University of Gajah Mada, Yogykarta
- Completed 1999
- Curriculum and materials used to develop a new option in "Conservation Forestry" - one of three
- Value of project still highly regarded by academic staff, interesting changes of opinion on conservation amongst academics and students
- Good legacy, fully used by host country, adapted and developed

#### 7-135 - Biodiversity of Peatswamp Forest, Kalimantan

- Seminal and counter-intuitive findings on peat structure
- Valuable knowledge on limitations for land use
- Project completed 2001, followed by 3 EU funded projects
- Good scientific legacy, especially relevant in terms of carbon flux considerations
- Not used by to any extent by host country
- Valuable scientific legacy but developmental legacy largely ignored

#### 5-127 - Wildlife and rattan trade in north Sulawesi 9-012 - Conservation of Paguyaman forest, Sulawesi

- Precursors to current project 13-028, Nantu NP
- These projects followed on from each other and DPhil
- Each was informed by the previous project/study
- Initial project identified conservation value and gap
- Current project continues to protect the area but runs out this year, first project started 1996
- Good scientific legacy, plus conservation area
- Developmental legacy picked up only at local level
- Outcomes remain highly vulnerable
- 50,000 ha protected for 10 years for £1 / ha / an

#### Babirusa



February 2007

#### <u>14-031 - Market led conservation of song birds</u> <u>14-037 - Community conservation of coral reefs</u>

- Mid-term Review of 14-031
- Aiming for market led approach and certification
- Similar challenges in certification systems
- 14-031 appears to be heading for a solid legacy in terms of its methodology, local uptake and impact
- 14-037 not reviewed in detail but good progress so far
- Scope for closer collaboration and exchange between these two projects

#### **Closed DI Projects in Sabah**

#### **Closed Projects looked at (there are others)**

- 7-040 Butterfly biodiversity in tropical rainforests
- 9-016 Orang-utan conservation Kinabatangan
- 10-025 Molecular tools for biodiversity

Current Projects with linkages (there are others)

- 14-014 Conservation of Bornean elephant
- 14-016 Plant diversity in commercially managed forests
- 14-022 Predictive tools for conservation effort

# 7-040 – Butterfly biodiversity in tropical rainforests

- Good science outcomes
- Capacity building, especially at UMS
- Key finding is the unexpectedly high biodiversity value in forest fragments
- Led on to DI project 14-022 on predictive tools
- Good scientific legacy, especially in light of extent of fragmentation
- Good capacity building legacy
- Potential development legacy restoration and conservation

February 2007

## 9-016 – Orang-utan conservation Kinabatangan

- Identified genetically distinct populations either side of river
- Unexpectedly high genetic diversity in fragmented populations
- Led on to 14-014 on Bornean elephant
- Capacity building support at UMS, HUTAN and WL
- Strong scientific legacy
- Good capacity building legacy UMS and Wildlife \*
- Potential development legacy for restoration and conservation

February 2007

#### 10-025 – Molecular tools for biodiversity

- Similar findings to previous 2 projects on diversity in fragments
- Very strong capacity building at UMS on new tools
- Led also into 14-022 on predictive tools
- Good science legacy
- Very positive capacity building legacy
- Important development potential legacy for restoration and conservation

#### Overview from DI sample in Sabah

- Strong capacity building, especially ITB at UMS
- Good capacity building in FRC and in WL
- Critical findings on biodiversity status of fragments
- Strengthened scientific networks (+other DI projects)
- Effective sequencing and building
- Direct contribution to 2006 declaration of 2 protected areas in Lowland tropical forest
- Strong contribution to conservation planning fragments and connectivity
- Was the synergy strategic or serendipity?

#### Compare and Contrast!!!

#### Indonesia

- Challenges to development
- Huge area and diversity
- Complex institutional landscape
- Large numbers of scientists
- Relatively few projects
- Isolated projects generally

#### <u>Sabah</u>

- Relatively wealthy country
- Small area, high biodiversity
- Simple institutional landscape
- Small numbers of scientists
- Close linkages
- Many sequential projects

#### **Key Points Raised**

- Importance of institutional linkages for sustainability
- Realistic assessment of institutional capacity, limited ability to make change in a single project
- Capacity of NGO sector, especially local NGOs
- Importance of institutional landscape
- Value of continuity of staffing, especially as it relates to networking locally and understanding local situation
- Aim to develop a critical mass, as at UMS

#### Now where?

- Sabah
  - Strong potential from Capacity Building and findings on fragmentation and biodiversity
  - Link now to restoration
- Indonesia
  - Analyse deforestation, governance link
  - Secure what has been achieved
- General
  - Field support
  - Management, reporting, M&E skills transfer

#### **General Findings**

- Very effective projects, good value for money
- Long residual impact in most cases
- Building networks is important Sabah cf. Indonesia
- Benefits of cross-learning between projects
- Generally favourable to contact and discussion
- Need to redefine types of project?
  - Discrete completed in single project
  - Stepwise initial phase, which can then be held
  - Contiguous starts a process, needs further support to capture benefits

#### Three categories of project

- <u>Discrete</u> completed, stable, good legacy potential as a "one-off" contribution, may be developed further but probably as one element amongst others. Examples would be computerised herbarium system
- <u>Stepwise</u> reaches a stable end point, great potential for further activities, these can be delayed for some time without major losses but note need to retain expertise. Examples are the work on forest fragments
- <u>Contiguous</u> need to have follow on support immediately after the project ends to avoid catastrophic loss. Example is Nantu NP

# **Discrete Projects**



Acknowledgement. R Wild in the style of R S Lowry

February 2007

# Stepwise projects



February 2007

# **Contiguous Projects**



February 2007

#### Linkages



February 2007

## Who's Legacy?

- Darwin Initiative
- Host country
  - Nationally
  - Institution
- Other countries
- Other supporting agencies
- Scientists
- Support staff
- Other beneficiaries

# **DI** Legacy

#### • Darwin Initiative may benefit from

- Enhanced reputation
- Value for money
- UK contribution to partner countries made explicit
- Science
- Influence
- Partnerships
- Capacity building in UK and host country institutions

### Host Country Legacy

#### • Host Countries

- Human resources
- Systems and processes
- Knowledge
- Reputation
- Contribution to sustainable development

#### Scientific

- Developmental
- Political

#### **Others' Legacy**

- Scientific findings
- Methodologies
- Negative and positive outcomes
- Regional benefits
- Lesson learning
- Value of networking via Darwin

#### Legacy and Risk

- Discrete projects generally small but clear legacy, low risk of loss
- Stepwise significant legacy but much improved by follow on projects and activities, can have some delay without major problems accruing, moderate risk of losing legacy
- Contiguous these projects make progress that MUST have immediate follow on support to avoid loss of legacy, high risk projects
- On balance, Stepwise projects seem to have optimal balance of risk and return in respect of legacy

#### Legacy and Sustainability

- Sustainability is a concept that would benefit from reconsideration as part of the legacy concept
- In UK, most institutions now operate on a high proportion of short term funding, even government agencies
- Is it reasonable to expect a single Darwin project to achieve sustainability for c. £ 150K over 3 years?
- Highest risk comes where developmental, policy and similar elements are critical, less so with predominantly science based projects

#### Issues on Legacy

- Science
- Skills and capacity
- Policy framework
- Critical mass?
- Science into development?
- New knowledge cf. Application of what is known?
- Processes and outcomes?
- Where do the constraints lie?
- How to get findings into practice Sabah cf. Indonesia?

### That's All Folks!!

