



Annual report to the Darwin Initiative 2006 - 2007

Project 14-035: Strengthening pro-poor wetland conservation using integrated biodiversity, economics and livelihood assessment



April 2007

Darwin Initiative
Annual Report 2006/7

Darwin Project Information

Project Ref. Number	14-035
Project Title	Strengthening pro-poor wetland conservation using integrated biodiversity and livelihoods assessment
Countries	Cambodia and Tanzania
UK Contract Holder Institution	IUCN (World Conservation Union)
UK Partner Institution	Overseas Development Group (University of East Anglia)
Host Country Partner Institutions	IUCN Cambodia Country Office Mekong Wetlands Biodiversity Conservation and Sustainable Use Programme IUCN Tanzania Country Office Economics and Livelihoods Group Asia, IUCN Sri Lanka IUCN Eastern Africa Regional Office
Darwin Grant Value	£274,256
Start/End dates of Project	April 2005 – October 2008
Reporting period	1 April 2006 to 31 March 2007 Annual Report Number 2
Project Leader Name	Dr. William Darwall
Project website	http://www.iucn.org/themes/ssc/our_work/freshwater/darwin_index.htm
Authors	Dr. William Darwall, David Allen
Date	26 April 2007

1. Project Background

Alongside the UN Millennium Development Goals of eradicating extreme poverty and hunger, and ensuring environmental sustainability through the integration of sustainable development principles into country development policies, the Convention on Biological Diversity calls for a significant reduction in the rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation.

Wetland ecosystems have been widely recognised, for example by the Millennium Ecosystem Assessment, as being both highly species-rich, and vital to people's livelihoods through the provision of direct and indirect ecosystem services. However, at the global scale many wetland systems have been lost or degraded through development interventions, and the biodiversity and livelihoods value of wetland systems need to be fully accounted for in the predominantly economic evaluation of development choices.

Drawing on experience being gained through undertaking integrated assessments of biodiversity, livelihood systems and ecosystem-economic valuations at two sites (Mtanza-Msona village on the Rufiji floodplain in Tanzania, and Stung Treng Ramsar Site on the Lower Mekong, Cambodia), this project is developing a best-practice guide (the 'Toolkit'), describing methodologies to provide information to decision-makers on the importance of wetland biodiversity and services to local people's livelihoods. To aid integration at the analytical and decision-making level, GIS is being used to map key overlying livelihood and biodiversity areas, and a Livelihoods Module of the IUCN Species Information Service (the globally-recognised source of data on species of conservation concern) database will be developed to hold data on the contribution of biodiversity to livelihoods at the species level. The aim of the project is to provide policy-makers with accessible, integrated information so that when decisions are made on alternative uses of wetland systems, the existing values of the ecosystem and the key role they play in sustaining livelihoods are not forgotten.

Over the 2006-7 period, the Toolkit has been developed extensively and tested during fieldwork for the integrated assessments at the two case study sites. Fieldwork has been completed at both sites, and final reports are being produced. Baseline GIS maps for the study sites have been completed, and the process of mapping the overlying biodiversity, livelihoods and economic interests at each of the sites is being undertaken at the IUCN office in Cambridge.

2. Project Partnerships

The partnership has coped with a number of challenges over the last year, including the closure of the Cambodia host project, the loss of a project principle with the move of Dr. Edward Allison from the Overseas Development Group, and the need to ensure efficient communication between project partners.

The Mekong Wetlands Biodiversity Conservation and Sustainable Use Programme (MWBP), the projects' host partner in Cambodia, closed on December 31, 2006, due to a change in the funding strategy of its core funding agency, the Global Environment Facility. With the agreement of the Darwin Initiative Secretariat, the IUCN Regional office in Vietnam took on regional coordination of the case study project in the Stung Treng Ramsar Site through the IUCN Cambodia office in Phnom Penh. An Internal Agreement between the IUCN Species Programme (the UK Contract Holding institution) and IUCN Vietnam was signed to transfer funds and coordination responsibilities. Although initially a challenge, the closure of the MWBP allowed key international staff to move into a full-time consultancy role with the Darwin project to undertake the second stage of fieldwork in January-February 2007 and completion of the final report. Kim Sreng Kong has provided key survey and logistical support. Initially on secondment from the Cambodian Ministry of Environment to the MWBP as the National Wetlands Advisor, Sreng is now an IUCN project officer in Phnom Penh. With his contacts with the Cambodian government, Sreng has ensured vital linkages to the national protected area planning and legislative processes, and brought with him invaluable contacts at the local and district-level with NGOs and government bodies. The project has worked closely with the Cambodian NGO, the Culture and Environment Protection Association (CEPA), and has provided skills training in the use of participative livelihoods and socio-economic research methods. The Stung Treng project has developed close links with the Department of Nature Conservation and Protection of the Ministry of Environment, the Provincial Department of Fisheries, as well as key Ramsar Site staff, and has provided key inputs, specifically in the form of mapping capability, into the development of the site management plan and community educational materials.

From February 2007 the IUCN Tanzania country office employed a full-time project coordinator, Gita Kasthala (conservation ecologist, UK), to add management capacity and specific ecological assessment skills. The project has also continued a close working relationship with Rufiji Environmental Management Programme (REMP) and Rufiji District Council staff, especially Mr. Hussein Harry, who participated fully in all the field trips. We have had productive relationship with project-based staff from the L'Institut de Recherche pour le Développement (IRD, Paris), whose baseline GIS mapping of the Mtanza-Msona project site has been utilised in our work. The Darwin project approach is being integrated into the development of REMP II project proposal development in the Rufiji floodplain and delta. The project management capacity of the UK lead institution, the IUCN Species Programme Freshwater Biodiversity Unit has been strengthened through the addition of a staff member (David Allen) to work on mapping and database development, and project coordination.

Dr. Edward Allison, project principle with the ODG, the UK partner institution, has accepted a key post with WorldFish, in Penang. At this stage, it is likely that ODG will remain as a partner, and that they will nominate an ODG member to provide key livelihoods analysis and direction in the production of the case study reports, as well as the key database, Toolkit and GIS mapping outputs. We will discuss any contractual changes required with the Darwin Secretariat in due course.

The project has made links with Dr. Conor Linstead (project leader, Darwin Initiative project 12-034: The Darwin Southeast Asian Wetland Restoration Initiative; Sustainable Water, Integrated Management & Ecosystem Research). Dr. Linstead has kindly agreed to provide comment on the Toolkit, based on his projects' work on the Lower Mekong in Vietnam.

3. Project progress

Baseline workplan for the reporting period April 2006 to March 2007

	Apr-Jun 06	Jul-Sep 06	Oct-Dec 06	Jan-Mar 07
1. Existing data sets compiled for ST and RD	█			
2. Training course #1 held in Cambodia and Tanzania				
3. Scoping mission in ST and Rufiji				
4. Field assessments in ST and Rufiji		█	█	█
5. Database and map base design	█	█		
6. Best practice 'Toolkit' (cross-project activity)	█	█		
7. Local language summaries #1				
8. Local language press release #1				
9. National policy briefs #1 in Cambodia and Tanzania			█	
10. National press release #1 in Cambodia and Tanzania			█	
11. Local awareness workshops #1 in ST and Rufiji				█
12. National awareness workshops #1 in Cambodia and Tanzania				█

3.1 Progress in carrying out project activities

Activity 1: Compilation of existing data sets for case study project sites

Stung Treng Ramsar Site Dr. Marcus Chambers, a VSO expert placed with the MWBP, compiled four reports based on a review of the literature and existing data sets held or created by MWBP: i) village-scale data and literature relating to MWBPs focus villages within the Stung Treng Ramsar site; ii) Mekong deep pools literature review (a key Mekong habitat), iii) Riverbed forest literature review (also a key Mekong habitat), and iv) review of the biodiversity significance of the Ramsar Site. These reports provide a wealth of useful information to feed into the project database and mapping work. A full bibliography of reports produced by the MWBP, many of which have informed the work of this project, can be accessed online at <http://www.mekongwetlands.org/assets/MWBP.R.P.15.03.07-05.pdf>.

Mtanza-Msona village Tanzanian project consultants selected from participants at the training workshop, held in Dar es Salaam in May, undertook literature reviews based primarily on REMP and UDSM research documents. Dr. Aloyce Hepelwa from the Economic Research Bureau, UDSM, compiled the Rufiji livelihoods literature review. Hamoud Idd Hamisi, Institute of Resource Assessment undertook the Rufiji biodiversity literature review. The reports from the joint IUCN – Rufiji District Council REMP project can be accessed at <http://www.iucn.org/themes/wetlands/REMP.html>.

Activities 2 and 3: Training course/workshops and scoping missions

Mtanza-Msona village training workshop and scoping mission The first workshop and the scoping survey were successfully completed between 2 - 12 May 2006. The scoping visit (2 - 6 May) to the Mtanza-Msona villages of the Rufiji District preceded the workshop. The scoping visit enabled the team to establish field contacts, and meet relevant government officials. Consultants from research institutions at UDSM were identified to undertake components of project fieldwork and analysis. Local data sources and other logistical requirements for the field surveys were identified.

The subsequent workshop held in Dar es Salaam (9–11 May) convened a team of potential experts for involvement in the project to discuss the proposed work, demonstrate and discuss methodologies to be used, and clarify how Darwin objectives can complement and assist in those of the REMP and how REMP information can be employed in achieving Darwin objectives. Fourteen participants including key stakeholders, and the project principles from ODG, IUCN Species Programme and IUCN ELG attended the workshop.

Stung Treng workshop and scoping mission These activities were successfully completed for the Cambodia project site in February 2006 and reported on in the 2005-6 annual report.

Activity 4: Field assessments in Stung Treng and Mtanza-Msona

Mtanza-Msona dry season fieldwork The first field assessment for the Mtanza-Msona (19 Sept – 7 Oct) was completed successfully with a team of 12 people from a combination of biodiversity, livelihoods and economic backgrounds, including Channa Bambaradeniya and Gayathri Sriskanthan, experts with the IUCN Asia Regional Species Conservation Programme. The project also benefited from the expertise of two volunteer members of the team; Gita Kasthala (subsequently appointed as national project coordinator), and Matthew Knisely (ethnobotanist, USA). The first steps in conducting an integrated approach to field assessment were evaluated and elaborated through this field trip, and initial household wealth ranking and biodiversity survey undertaken. The ethnobotanical approach proved an extremely valuable means of promoting linkages between biodiversity and livelihoods disciplines. Preliminary feedback reports that the level of integration developed significantly during the field period as the team members gained a better understanding of the objective of “integration”. Findings from the field trip have been incorporated into the ongoing development of the best-practice Toolkit.

Mtanza-Msona wet season fieldwork The Rufiji River has a highly seasonal flow, which strongly influences the pattern and location of community livelihood-based resource utilisation. To capture these seasonal differences, as well as map the effects of the flooding regime and resultant changes in biodiversity distributions, the project team had intended to undertake fieldwork during the wet and dry seasons. However, a combination of delayed rains and Darwin Initiative financial reporting deadlines (with the fieldwork undertaken close to the financial year end) resulted in the wet season fieldwork being undertaken over the period 24 Feb – 9 March 2007, prior to the arrival of the main wet season. However, significant amounts of rainfall did occur during the fieldwork, and illustrated that assessment activities may have been severely curtailed by access constraints during the peak rainfall period. This had little effect on livelihood and socio-economic data collection, as researchers could ask for informants to answer questions on wet season resource use and locations based on experience from preceding years. There may be an incomplete picture of biodiversity seasonality, but this is not thought likely to be greatly significant.

A team of six people participated in the field trip, including David Allen from IUCN Species Programme. David has responsibility for developing the database and mapping components of the project, and gained valuable insights into village resource use patterns. Key gaps in biodiversity data had been identified and were addressed during this fieldwork period, especially odonata, as well as additional mapping of village infrastructure such as roads and facilities. The livelihoods assessment teams’ work focused primarily on facilitating focus-group discussions with stakeholders on a range of issues, including fish resources and utilisation, human-wildlife interactions, and conflicts and threats. The latter focused on villager’s perception of risk related to the proposed development of the Steigler’s Gorge hydroelectric dam, upstream from the village, and resource use and conflict in the Selous Game Reserve. An informal but valuable meeting was also held by the biodiversity team with the head of the reserve management sector adjacent to Mtanza-Msona village, covering poaching and encroachment issues, as well as community participation programmes and wildlife monitoring.

Specimens collected during the field assessments are in the process of being identified by project consultants with assistance from UDSM, Dr. Viola Clausnitzer from the IUCN Odonata Specialist Group, and other regional experts. More than 100 Odonata specimens were collected, including at least one new record for the survey area. Production of the final report is progressing well, and Lucy Emerton, ecosystem economics specialist with ELG Sri Lanka, will join the Tanzania team in May 2007 to assist with analysis and the final draft of the report.

Stung Treng Ramsar Site field assessment The Darwin assessment has informed, and is a key element in, the development of the management plan for the Stung Treng Ramsar Site, strengthening the management capacity of the site management authorities. The focus of the project has been to assess the impact on livelihoods and biodiversity of the Site management plan proposed by MWBP consultant Robert Timmins. The proposals, developed in line with a draft Protected Area Law, define special management zones within the Site designed to protect priority species and habitats.

The assessment in Cambodia has followed a different model from that in Tanzania, in part influenced by the existing work programme of MWBP, the host project, and the impact of its closure in Dec 2006. Assessment fieldwork took place in a number of short trips by MWBP staff from April – December 2006, followed by the final survey by a team of international consultants over the period 26 Jan – 5 Feb 2007. Kim Sreng Kong has played a key role in undertaking and coordinating the majority of the assessment work, and developing links between the Darwin project and relevant authorities and government departments. A draft final report has been produced and is in the process of review and comment by project principles.

Activity 5: Database and map base design

GIS map bases for both field assessments have been developed. The map for Mtanza-Msona was re-digitised from a map created by Stéphanie Duvail from IRD (as part of the REMP project in the Rufiji district). The Stung Treng Ramsar Site map was created from a range of sources by Anna Mclvor (IUCN Species Programme), who created all base map layers. The process of mapping data from the Stung Treng project is progressing well, and outputs have been used in the production of the Ramsar Site sign in Stung Treng town and in the Ramsar Site, in the draft Management Plan for the Ramsar Site, and to present the proposed management zones during the consultation workshop in Stung Treng. With receipt of all data from the assessment projects, work has commenced on the mapping of livelihood, biodiversity and economic interests at each of the project sites.

Initial discussions on data requirements and linkages have been undertaken towards the development of the livelihoods module of the IUCN Species Information Service Data Entry Module (SISDEM), and development will progress once full datasets have been received from the assessment projects. Working with the IUCN Species Trade and Use Unit a proposal has been submitted to the IUCN *Conservation for Poverty Reduction Initiative*, a framework programme to leverage funding for work in support of the Millennium Development Goals. The proposal seeks to further develop the livelihoods module produced through the Darwin project and to ensure its integration into SISDEM as a means of providing cross-cutting data on both the livelihoods value and conservation status of species. Data and experience gained through this Darwin project will be used to populate the database and demonstrate methods for data collection.

Activity 6 'Best practice' Toolkit:

The Toolkit continues to evolve as ideas on the format and content are advanced. Over the reporting period, two draft versions were circulated to Darwin project participants through an internal project website. Feedback on the utility of the Toolkit, as well as comments on its improvement, have been received from the Stung Treng team as part of their final report, and will also be a component of the Mtanza-Msona report.

Activity 7: Local language summary #1

Mtanza-Msona village Originally scheduled for Qu. 5 (Oct - Dec 2006), the project summary is now being produced as part of preparations for the local awareness workshop, to be held in Mtanza-Msona village in early May (Qu. 7). The delay was introduced by the Tanzania project team, who wished to include elements of the fieldwork analysis in the summary to distribute to the community and other local stakeholders.

Stung Treng Ramsar Site In preparation for the final field assessment in January, the consultants produced a briefing paper to inform relevant national and provincial counterparts on the purpose of the survey and to seek their participation in the fieldwork.

Activity 8: Local language press release #1

Mtanza-Msona village Currently in preparation, the press release will be distributed to coincide with the village-based local awareness workshop in May - June 2007.

Stung Treng Ramsar Site Awaiting the production by the project consultants of the final draft of the report, a single Khmer language press release will be produced and distributed by the IUCN Cambodia project officer, Kim Sreng Kong.

Activity 9: National policy brief #1

Mtanza-Msona village This document will be produced and disseminated by IUCN Tanzania following completion of the final country project report. The expected date is June 2007.

Stung Treng Ramsar Site Awaiting the production by the project consultants of the final draft of the report, the local language press release will be produced and distributed by the IUCN Cambodia project officer, Kim Sreng Kong. Publication is expected late May 2007.

Activity 10: National press release #1

Mtanza-Msona village This document will be produced and disseminated by IUCN Tanzania following completion of the final report in May-June 2007.

Stung Treng Ramsar Site Combined with Activity 9, a single press release will be produced by the IUCN Cambodia office in May-June 2007.

Activity 11: Local awareness workshop #1

Mtanza-Msona village Originally scheduled for quarter 5, the first workshop is now due to take place in May (Qu. 7). The workshop has been deferred due to the completion of the dry season - wet season cycle of field survey. As mentioned above, the field team considered the seasonal variation sufficiently significant to warrant delay in the workshop until findings from both surveys had been summarised for public presentation).

Scheduled for Qu. 5, the project summary is being produced as part of preparations for the local awareness workshop, to be held in Mtanza-Msona village in early May (Qu. 7). The delay was introduced by the Tanzania project team, who wished to include elements of the fieldwork analysis in the summary to distribute to the community and other local stakeholders.

Stung Treng Ramsar Site The first local awareness workshop (Integrated Wetland and Biodiversity Assessment in the Stung Treng Ramsar Site: the implications of the proposed special management zones. Presentation of preliminary findings and consultation) was held in Stung Treng on 9 Feb 2007, following the final period of fieldwork and rapid analysis. Attended by 27 people from local communities, NGOs and government bodies, including the Stung Treng Provincial Governor, the workshop produced useful critique of the assessment methodology, as well as reviewing the evaluation produced by the Darwin project of the impact on livelihoods and biodiversity of the proposed management zones in the Ramsar site.

Activity 12: National awareness workshop #1

Mtanza-Msona village and Stung Treng Ramsar Site In both projects, the first national awareness workshop is still to be held. Kim Sreng Kong and Gita Kasthala, in Cambodia and Tanzania, will coordinate them respectively, after the production of the final reports to ensure that all analysis and results are completed.

3.2 Progress towards Project Outputs

1. Wetland biologists, economists and rural development planners trained in integrated biodiversity, livelihood and economic assessment field techniques

Assessments in both countries have utilised the best practice Toolkit to guide fieldwork, and teams have comprised both national and international experts. Training workshops were held, and skills transferred in the course of the scoping trips to the study sites.

2. Wetland sites in Tanzania and Cambodia with threatened biodiversity and high livelihood values identified and prioritised for further assessment

Workshops in each focus country carried out an evaluation of potential sites based on the availability of existing knowledge and experience of the site, as well as an understanding of potential threats. The assessment sites at Stung Treng and Mtanza-Msona were identified through this process.

3. Integrated biodiversity, livelihoods and economic assessments carried out

Integrated assessments utilising the methodologies presented in the Toolkit were completed by March 2007 and final reports are in the process of preparation,

4. Best practice guide for assessing and integrating biodiversity within development planning processes produced

The *Toolkit* has been through three major revisions. Comments and feedback from the field assessment final reports will be incorporated, and a further *Case Study* chapter, based on the final reports developed. A final draft for peer review is expected by Qu. 8.

5. Electronic databases and maps identifying key sites of overlap between threatened species and high livelihood dependence produced

Baseline maps have been produced for both assessment sites and will be further developed through the integration of biodiversity, livelihoods and economic data over the coming period. Initial discussions have been held regarding the development of the project database, and development will commence in Qu. 7.

3.3 Standard Output Measures

Table 1 Project Standard Output Measures

Code No.	Description	Year 1 Total	Year 2 Total	Total
6A 6B	At least 30 people from Tanzania and Cambodia partner institutions provided with 0.5 weeks of training in integrated wetland assessment techniques	Cambodia 4 day workshop: 21 participants	Tanzania 3 day workshop: 14 participants	35 national and international experts
7	Existing data have been identified and collated for at least 2 threatened wetland sites in Cambodia and Tanzania		Completed for Tanzania and Cambodia project sites	Completed for both sites
15B	At least 2 local press releases on wetland assessment and conservation for at least 2 threatened wetland sites in Cambodia and Tanzania		Not yet undertaken for Tanzania. 1 radio interview, and press release on threat to White Shouldered Ibis in the Ramsar Site, Cambodia.	1 interview. Expected May-June 2007
15A	At least 2 national press releases on wetland biodiversity and livelihood linkages and management issues in Cambodia and Tanzania		Articles in IUCN <i>Species</i> journal and the <i>SSC Bulletin</i> . National project press materials expected May 2007	Expected May-June 2007
7	At least 200 copies of local language awareness and training materials on wetland assessment and conservation for Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania		Completed but not yet disseminated for Stung Treng. Expected for Mtanza-Msona in May on completion of the field survey reports and analysis	Expected May-June 2007
7	At least 200 copies of national policy briefs on wetland biodiversity and livelihoods linkages and management issues produced and disseminated in Cambodia and Tanzania		To be produced on completion of the field assessment reports and analysis	Expected May-June 2007

Table 2 Publications

Type	Detail	Publisher	Available from	Cost £
No publication outputs are due from the Project at this stage.				

3.4 Progress towards the project purpose and outcomes

The project is developing and testing an integrated biodiversity, economic and livelihood assessment methodology to strengthen pro-poor approaches to wetland conservation. Assessment methodology is being tested through two case studies at sites prioritised in terms of threatened biodiversity and high human dependence (with emphasis on the rural poor). In the Stung Treng Ramsar Site, on the Lower Mekong in Cambodia, an integrated assessment has been undertaken of the introduction of special management zones. The other study, focusing on the Mtanza-Msona village community and its associated wetland resources on the Rufiji River in Tanzania, is evaluating the impacts of external threats on the livelihood and biodiversity sustainability of the community and its resource base. The studies have yielded detailed scientific and management information, including GIS maps, on key values and overlaps between threatened species and high human dependence, and site-level action plans for pro-poor wetland conservation and sustainable use.

The case studies have been applied through an iterative process to the development of a best practice 'Toolkit' for assessing and integrating biodiversity within development planning processes. A draft Toolkit has been produced and tested through the country case studies, with comment and suggestions from the projects feeding back into the Toolkit development.

Specifically, the project in Stung Treng has had the following impacts; facilitated participation of communities within the Ramsar Site in the development of the Site management plan; built capacity and provided practical skills training in integrated assessment methods to staff from CEPA, Ramsar Site and administrative staff, and the Provincial Department of Fisheries; and developed project management capacity within IUCN Cambodia. In Tanzania, the assessment project has worked closely with the Mtanza-Msona community, assisted with the further development of the village environmental management plan and training key villagers in survey and recording techniques. Focus groups have allowed community members to voice concerns over threats to wetland livelihoods, and resource use and access. At the district and national level, the project has continued links with staff related to the REMP and REMP II projects.

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

The project, through its case studies in Tanzania and Cambodia, has built information and capacity on wetland biodiversity assessment, environmental economic valuation and livelihood analysis in country organisations, promoting improved knowledge and understanding of the links between ecosystem conservation and poverty reduction. The project aims to strengthen countries' capacity to meet their obligations under both the Convention on Biological Diversity and the Ramsar Convention.

Stung Treng Ramsar Site assessment Input to the Ramsar Site zonation management planning processes will enable informed and balanced decision making to benefit both biodiversity and dependence by the poor on bio-resources. Baseline datasets will enable monitoring of the impacts of the Ramsar Site management to the benefits of biodiversity.

Mtanza-Msona village assessment Baseline data will be in place in a format to enable informed and balanced decision making to benefit both biodiversity and dependence by the poor on bio-resources in the face of any future developments likely to impact the village resource base and wetland ecosystem – e.g. the Steigler's Gorge hydroelectric dam proposal. All stakeholders will be sufficiently informed to have effective input to future decision-making processes, with access to mapping and database outputs produced from the assessment data.

Best practice Toolkit Now at an advanced stage, and with the development of the chapter based on the case studies in process, the Toolkit will provide best practice guidelines for application to site-based threats and development plans globally in the interests of benefiting biodiversity and those most dependent upon natural resources.

4. Monitoring, evaluation and lessons

Project management and evaluation is based on verification, through receipt by the IUCN Species Programme, of the indicators identified in the project logframe in Annex 2. To date, the indicators which project activities have fed into, are;

1. *At least 30 local and national-level staff from at least 4 partner institutions from Tanzania and the Cambodia trained by end Yr 1*

Training materials, presentations, participant lists and workshop evaluations provide verification for this indicator.

2. *Scoping exercise carried out in Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania by end Yr 1*

Field scoping reports are the means of verification. Scoping reports for both assessments are contained in the annexes.

3. *Demonstration sites for field assessments subjected to stakeholder dialogues by end Yr 1*
- Workshop reports provide evidence of assessment site review for both Tanzania and Cambodia.

4. *Baseline assessments carried out in the Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania by end Yr 2*

Project activities verified by receipt of datasets, half year and annual reports and post-fieldwork reports from the assessment teams. See documents in the annexes.

5. Draft best practice guide developed and peer reviewed by end Yr 2.

As the Toolkit is not at the stage of external review, this activity cannot as yet be verified. The DRAFT Toolkit is available for review and comment internally on the internal project website:
<http://iucn.org/themes/ssc/our%5Fwork/freshwater/darwin%5Fiwa/index.html>

6. Maps for Stung Treng Ramsar Site, Cambodia and the Mtanza-Msona Village, Tanzania by end Yr 3
Baseline maps have been produced for both assessment sites and utilised by the country projects. Maps produced by the project have been utilised in the Stung Treng Ramsar Site draft management plan (Lopez 2007).

IUCN Species Programme, the lead project organisation, undertakes internal monitoring and evaluation. Initial evaluation is through internal comment on the draft Toolkit. Comments on the toolkit provided from those involved in the field assessment are being incorporated into the draft Toolkit. In this way the work to date is being internally evaluated and recommendations acted upon.

Project management National and regional scale project management processes have been reviewed on an ongoing basis. In one case national management of the project was found to be not as strong as it might have been, and a full-time project coordinator was subsequently appointed. Regional management was reviewed and responsibilities were re-assigned to better match the experience and country focus of the personnel involved.

Project timetable A review of the activities table has found that season-dependant field activities were hard to complete in line with the Darwin end of year financial reporting requirements. In addition, the initial scheduling of project activities did not always take into account the linkages between fieldwork activities and other project activities (such as the local and national press releases, workshops and policy briefs. This has resulted in some activities being delayed until the next financial year, with the costs covered through an agreed redistribution across budget lines in the past financial year. The conclusion is that it is best to try and avoid scheduling important activities close to the end of the financial year, especially where the exact timing of an activity is beyond our control i.e. is weather dependant.

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

None required.

6. Other comments on progress not covered elsewhere

A number of seasonally dependant field activities were scheduled to be undertaken close to the Darwin financial end of year. Given that the exact timing of these activities is beyond our control (being somewhat weather dependant) we have had to make certain compromises to fit with the Darwin reporting deadlines. These have included: conducting one field survey earlier than would have been preferred (this has possibly led to a loss in some seasonal information); and paying consultants in full before completion of their final reports. The early payment of consultants is something we feel might put the quality of the project outputs at risk. These difficulties would be somewhat alleviated if there was more flexibility in allowing committed funds (e.g. payments committed to engaged consultants) to be carried into the next year. In the case of the Rufiji project, the second period of fieldwork was due to take place during the wet season; although the start of the rains was delayed in 2007, not commencing until April, the project partners were unable to defer fieldwork. In addition, consultants had to be paid prior to the delivery of project outputs, reducing the leverage that the project has to ensure high quality results.

7. Sustainability

Project profiling within host countries Project profiling activities scheduled in the logframe to have been undertaken over this reporting period have been delayed, as detailed above. It is expected that information and publicity materials will be produced by the country projects following completion of the final reports in May-June 2007. High profile participants attended the post-fieldwork local assessment workshop, held in Stung Treng, including representatives from local and regional government and NGOs. In addition, there has been direct involvement by the Ministry for Environment in Cambodia, and the Regional Natural Resources Department and Natural Resource Officers in Rufiji District in the assessment case studies from the very early stages.

Exit Strategy Although the project aims at building long-term capacity to undertake integrated wetland assessment, and intends that the methods and tools it promotes will be continued over the long-term, it does not aim to set in place stand-alone activities that will continue after the project's end. Rather its major focus is on strengthening existing institutions and management approaches, and on providing training, awareness and improved tools and information to enable this.

The project explicitly takes place within the context of ongoing national activities and institutions that are concerned with wetlands management and sustainable use, and that will continue after the project's end. A Rufiji District Officer, who was involved in REMP and the development of the REMP II proposal, has participated in all field activities in Tanzania. In Cambodia, the IUCN project officer, formerly with the Department of Nature Conservation and Protection of the Ministry of Environment, has maintained close links with government agencies and the Ramsar officials.

8. Dissemination

A high profile consultative workshop was held in Stung Treng in March 2007. Additional local and national dissemination activities (Local language summaries #1, Local language press release #1, National policy briefs #1 in Cambodia and Tanzania, National press release #1 in Cambodia and Tanzania, Local awareness workshops #1 in Mtanza-Msona, National awareness workshops #1 in Cambodia and Tanzania) will take place following the production of the final field assessment reports in May-June 2007. Dissemination activities have been delayed for the reasons detailed in the sections above.

Project articles have been produced for IUCN publications (IUCN *Species*, and the *SSC Bulletin*), and links made with the *Science Bulletins* website (<http://sciencebulletins.amnh.org/#>) of the American Museum of Natural History, which has expressed great interest in publishing a synopsis of the project and it's mapping outputs.

Primary dissemination activities will take place during Yrs 2 – 3, following peer review and publication of the Toolkit, and production of the mapping outputs and the SISDEM livelihoods database module.

An article describing the project outputs will be submitted to a peer-reviewed journal in the coming year.

9. Project Expenditure

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

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

None to report at this mid-stage of the project.

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><i>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</i></p> <ul style="list-style-type: none"> • <i>The conservation of biological diversity,</i> • <i>The sustainable use of its components, and</i> • <i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i> 			
Purpose			
<p>Pro-poor approaches to the conservation and sustainable use of threatened wetlands strengthened through improved capacity, awareness and information on the biodiversity and livelihood value of aquatic ecosystems in the Lower Mekong and East Africa</p>	<p>Innovative methodologies developed and used for wetland assessment by Yr 3 New knowledge and learning on wetland biodiversity, livelihoods, economics and poverty linkages by Yr 3 Integration of pro-poor approaches and measures into wetland conservation and development plans by Yr 3 Strengthened capacity and awareness to understand and act on wetland biodiversity, livelihoods, economics and poverty linkages by Yr 3</p>	<p>Project technical and awareness publications Project progress and workshop reports Partner institutions' national strategies, policies and plans Site-level development and conservation strategies and management plans</p>	<p>Pro-poor and environmentally sustainable development approaches remain a priority for governments at national and sub-national levels in Tanzania and Cambodia Non-governmental and community-based organisations remain supportive of wetland conservation and sustainable use</p>
Output 1			
<p>Wetland biologists, economists and rural development planners trained in integrated biodiversity, livelihood and economic assessment field techniques</p>	<p>At least 30 local and national-level staff from at least 4 partner institutions from Tanzania and the Cambodia trained by end Yr 1</p>	<p>35 experts from 16 national and international organisations have participated in the 2 training workshops held in Tanzania (Yr 1) and Cambodia (Yr 2).</p>	
<p><u>Activity 1.1</u> Conduct training courses in integrated wetland assessment techniques for partner institutions (Yr 1)</p>		<p>Undertaken in Cambodia (Yr 1) and Tanzania (Yr 2). Project consultants selected from participants.</p>	
<p><u>Activity 1.2</u> Hold site level awareness workshops on integrated wetland assessment and conservation (Yr 1)</p>		<p>Held in Stung Treng, Cambodia, in February 2007, with 27 participants from local and national NGOs, Ramsar site staff, and government staff. Rufiji project workshop due to be held in May 2007 (Yr 3) when data analysis completed.</p>	
<p><u>Activity 1.3</u> Facilitate national dialogues on site selection and project aims (Yr 1)</p>		<p>Undertaken in Cambodia (Yr 1) and Tanzania (Yr 2) as part of the initial project workshops</p>	
Output 2			
<p>Wetland sites in Tanzania and Cambodia with threatened biodiversity and high livelihood values identified and prioritised for further assessment</p>	<p>Scoping exercise carried out in Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania by end Yr 1 Demonstration sites for field assessment subjected to stakeholder dialogues by end Yr 1</p>		
<p><u>Activity 2.1</u> Carry out scoping missions to elaborate field sites (Yr 1)</p>		<p>Undertaken by national and international team as part of initial workshops in Cambodia (Yr 1) and Tanzania (Yr 2).</p>	

Output 3		
Integrated biodiversity, livelihoods and economic assessments carried out.	Baseline assessments carried out in the Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania by end Yr 2	
<u>Activity 3.1</u> Implement field assessments of Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 1-2)		Field assessments completed in Cambodia (Feb 2007) and Tanzania (March 2007). Draft assessment report complete for Stung Treng project, in preparation in Tanzania. Data transferred to IUCN project leader.
Output 4		
Best practice guide for assessing and integrating biodiversity within development planning processes produced	Draft best practice guide developed and peer reviewed by end Yr 1 At least 500 copies of best practice guide published and distributed by end Yr 2	
<u>Activity 4.1</u> Produce and disseminate draft best practice guide on pro-poor approaches to wetland assessment (Yr 1/2)		Second draft finalised Feb. 2007. Comments and revisions based on field assessments to be integrated when final assessment reports produced.
<u>Activity 4.2</u> Publish and disseminate final best practice guide on using pro-poor approaches to wetland assessment for conservation and development planning (Yr 2-3)		Dissemination activities to commence in Yr3 following peer-review process in Yr 3.
Output 5		
Electronic databases and maps identifying key sites of overlap between threatened species and high livelihood dependence produced	Electronic database and maps for the Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania by end Yr 3	
<u>Activity 5.1</u> Develop database and maps identifying key areas of overlap between threatened species and high livelihood dependence in Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 1-2)		Baseline maps for both assessment sites have been produced (Yr 1-2), and utilised in second phase of fieldwork at both sites. Approaches for displaying integrated data are being developed. Development work on database has yet to commence (scheduled for Yr 3 (quarter 7 onwards), but initial consultative work undertaken with internal IUCN stakeholders, and conceptual linkages within livelihoods module of the SISDEM database mapped out.
<u>Activity 5.2</u> Integration of field data into database and maps (Yr 2-3)		Integrated already trailed with early data from both field assessments. Full mapping will commence with receipt of SISDEM data files and final reports from country assessment teams (expected in quarter 7).

Output 6			
Lessons learned for wetland and development policy and planning documented and disseminated to local, national and regional decision-makers in Tanzania and Cambodia	At least two site-specific technical status reports for Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania published and disseminated by end Yr 2	Published documents Reviews and other feedback on documents Requests received for documents Downloads of documents from website Reports on workshops and dialogues Workshops and dialogues participants' evaluations	Documentation reaches and positively influences key wetland planners, decision-makers and stakeholders Regional, national and local stakeholders agree to participate in dialogues and are receptive to project lessons and findings
Technical and awareness publications	At least four local language summaries published and disseminated through site-level awareness workshops by end Yr 1 and end Yr 3 At least four sets of policy briefs on biodiversity, livelihood and economic linkages, and management implications, published and disseminated through national dialogues by end Yr 1 and end Yr 3		
<u>Activity 6.1</u> Produce and disseminate technical status reports on biodiversity and livelihood status and management recommendations at Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 2)		Draft report for the Stung Treng assessment is being revised following internal review by project leaders. Zonation and species maps are being produced by the IUCN Species Programme. Draft final report for the Mtanza-Msona assessment is in preparation (due quarter 7). Dissemination of the final assessment reports will occur following acceptance of the final reports (expected early quarter 7).	
<u>Activity 6.2</u> Produce and disseminate local language summaries on wetland assessment and conservation in the Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 1)		Expected in both project countries in quarter 7, following production of the final assessment reports.	
<u>Activity 6.3</u> Produce and disseminate local language summaries on biodiversity and livelihood status of Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 3)		Expected for both project countries in quarter 7, following production of the final assessment reports.	
<u>Activity 6.4</u> Produce and disseminate national policy briefs on wetland biodiversity and livelihoods linkages and management issues (Yr 1)		Expected in both project countries in quarter 7, following production of the final assessment reports.	
<u>Activity 6.5</u> Produce and disseminate national policy briefs on biodiversity and livelihood status and management recommendations for Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 3)		Expected in both project countries in quarter 7, following production of the final assessment reports.	

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			
Pro-poor approaches to the conservation and sustainable use of threatened wetlands strengthened through improved capacity, awareness and information on the biodiversity and livelihood value of aquatic ecosystems in the Lower Mekong and East Africa	Innovative methodologies developed and used for wetland assessment by Yr 3 New knowledge and learning on wetland biodiversity, livelihoods, economics and poverty linkages by Yr 3 Integration of pro-poor approaches and measures into wetland conservation and development plans by Yr 3 Strengthened capacity and awareness to understand and act on wetland biodiversity, livelihoods, economics and poverty linkages by Yr 3	Project technical and awareness publications Project progress and workshop reports Partner institutions' national strategies, policies and plans Site-level development and conservation strategies and management plans	Pro-poor and environmentally sustainable development approaches remain a priority for governments at national and sub-national levels in Tanzania and Cambodia Non-governmental and community-based organisations remain supportive of wetland conservation and sustainable use
Outputs			
Wetland biologists, economists and rural development planners trained in integrated biodiversity, livelihood and economic assessment field techniques	At least 30 local and national-level staff from at least 4 partner institutions from Tanzania and the Cambodia trained by end Yr 1	Training materials Course materials and participants lists Participants' evaluations of training course	Trained staff remain in institutions, and are willing and able to continue to use the skills developed and methodologies learned
Wetland sites in Tanzania and Cambodia with threatened biodiversity and high livelihood values identified and prioritised for further assessment	Scoping exercise carried out in Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania by end Yr 1 Demonstration sites for field assessment subjected to stakeholder dialogues by end Yr 1	Field scoping data Reports on workshops and dialogues	Relevant stakeholders able to agree on priority sites for integrated wetland assessment
Integrated biodiversity, livelihoods and economic assessments carried out	Baseline assessments carried out in the Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania by end Yr 2	Field assessment data Field assessment reports	Natural and security conditions in demonstration sites remain supportive of fieldwork Appropriate staff from partner institutions available and willing to participate
Best practice guide for assessing and integrating biodiversity within development planning processes produced	Draft best practice guide developed and peer reviewed by end Yr 1 At least 500 copies of best practice guide published and distributed by end Yr 2	Peer reviews on best practice guide Published best practice guide Reviews and other feedback on best practice guide Requests received for best practice guide Downloads of best practice guide from web	Best practice guide reaches and positively influence key wetland planners, decision-makers and stakeholders

Electronic databases and maps identifying key sites of overlap between threatened species and high livelihood dependence produced	Electronic database and maps for the Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania by end Yr 3	Electronic database Electronic maps Downloads of maps from website Requests for copies of maps Use of database and maps in wetland management planning by partners	Database and maps reach and positively influence key wetland planners, decision-makers and stakeholders
Lessons learned for wetland and development policy and planning documented and disseminated to local, national and regional decision-makers in Tanzania and Cambodia	At least two site-specific technical status reports for Stoeng Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania published and disseminated by end Yr 2 At least four local language summaries published and disseminated through site-level awareness workshops by end Yr 1 and end Yr 3 At least four sets of policy briefs on biodiversity, livelihood and economic linkages, and management implications, published and disseminated through national dialogues by end Yr 1 and end Yr 3	Published documents Reviews and other feedback on documents Requests received for documents Downloads of documents from website Reports on workshops and dialogues Workshops and dialogues participants' evaluations	Documentation reaches and positively influences key wetland planners, decision-makers and stakeholders Regional, national and local stakeholders agree to participate in dialogues and are receptive to project lessons and findings
Activities			
<i>Workshops</i>	Conduct training courses in integrated wetland assessment techniques for partner institutions (Yr 1) Hold site level awareness workshops on integrated wetland assessment and conservation (Yr 1) Hold site level awareness workshops on assessment findings (Yr 3) Facilitate national dialogues on site selection and project aims (Yr 1) Facilitate national dialogues on assessment findings (Yr 3)		
<i>Field Assessment</i>	Carry out scoping missions to elaborate field sites (Yr 1) Implement field assessments of Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 1-2)		
<i>Database and Maps</i>	Develop database and maps identifying key areas of overlap between threatened species and high livelihood dependence in Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 1-2) Integration of field data into database and maps (Yr 2-3)		
<i>Technical and Awareness Publications</i>	Produce and disseminate technical status reports on biodiversity and livelihood status and management recommendations at Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 2) Produce and disseminate local language summaries on wetland assessment and conservation in the Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 1) Produce and disseminate local language summaries on biodiversity and livelihood status of Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 3) Produce and disseminate national policy briefs on wetland biodiversity and livelihoods linkages and management issues (Yr 1) Produce and disseminate national policy briefs on biodiversity and livelihood status and management recommendations for Stung Treng Ramsar Site Cambodia and Rufiji Floodplain and Delta Tanzania (Yr 3)		
<i>Best practice guide Development</i>	Produce and disseminate draft best practice guide on pro-poor approaches to wetland assessment (Yr 1) Undertake peer review of best practice guide (Yr 3) Publish and disseminate final best practice guide on using pro-poor approaches to wetland assessment for conservation and development planning (Yr 2-3)		

Acronyms

CBD	Convention on Biological Diversity
CEPA	Culture and Environment Protection Association, Cambodia
COSTECH	Tanzania Commission for Science and Technology
EARO	IUCN Eastern Africa Regional Office
ERB	Economic Research Bureau (University of Dar es Salaam)
FBU	Freshwater Biodiversity Unit (Species Programme, IUCN)
ELG	Ecosystems and Livelihoods Group Asia, IUCN Asia Regional Office
GEF	Global Environment Facility
IRA	Institute of Resource Assessment, UDSM
IRD	L'Institut de Recherche pour le Développement
IUCN	The World Conservation Union
MEA	Millennium Ecosystem Assessment,
MWBP	Lower Mekong Wetlands Biodiversity Conservation and Sustainable Use Programme
ODG	Overseas Development Group, School of Development Studies, UEA
Ramsar	The Convention on Wetlands of International Importance
REMP	Rufiji Environmental Management Programme (and REMP II, a continuation proposal under development)
SISDEM	IUCN Species Information Service Data Entry Module
UDSM	University of Dar es Salaam
UEA	University of East Anglia
UNDP	United Nations Development Programme

Annex 3 Supplementary materials

Field assessment photographs: Stung Treng Ramsar Site



Village resource assessment, Stung Treng



Local awareness workshop, Stung Treng, Cambodia



Opening of the information sign for the Stung Treng Ramsar Site. The sign was developed from mapping outputs from the Darwin Initiative project.



Processing fish, Stung Treng Ramsar Site

Field assessment photographs: Mtanza-Msona, Tanzania



Installing bucket traps as part of the amphibian survey, Lake Mtanza



Fish catch, Lake Mtanza



Dai Lake, Mtanza-Msona. An African Jacana *Actophilornis africanus*, walking on a dense mat of the invasive aquatic plant *Pistia stratiotes* L.. *Pistia* is present in most water bodies across the project area.



A female *Anax tristis*, found near several water bodies in the survey area, and one of the largest species in the region. Though common in coastal areas in Eastern Africa, it had not previously been recorded from the Rufiji region.

Annex 4 Supplementary materials submitted by email

The following materials will be sent by email to ECTF as zipped PDF files.

Email 1

- IUCN 14-035 annual report 2006-2007
- A Toolkit for integrated wetland assessment. Draft, February 2007
- Annual Report 2006-2007, IUCN Ecosystems and Livelihoods Group Asia
- Mapping outputs: Mtanza-Msona baseline map
- Mapping outputs: Stung Treng baseline map

Email 2: Supplementary materials, Mtanza-Msona project site, Tanzania

- Rufiji annual report April 2007
- Rufiji biodiversity literature review
- Rufiji biodiversity scoping report
- Rufiji dry season fieldwork report
- Rufiji livelihoods literature review
- Rufiji livelihoods scoping report
- Rufiji scoping survey and workshop report

Email 3: Supplementary materials, Stung Treng project site, Cambodia

- Darwin Mekong deep pool literature review
- Darwin riverbed forest literature review
- MWBP village-scale data and literature review
- Stung Treng #1 Darwin workshop report
- Stung Treng #1 Darwin workshop presentation
- Stung Treng biodiversity and fisheries report
- Stung Treng Darwin fieldwork implementation plan
- Stung Treng Darwin project briefing paper
- Stung Treng Ramsar biodiversity review

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.	Yes
Supplementary materials sent by 2 further emails.	Yes
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.	No
Have you completed the Project Expenditure table?	Yes
Do not include claim forms or communications for Defra with this report.	