CEPF FINAL PROJECT COMPLETION REPORT

Organization Legal Name	IUCN, International Union for Natural Resources
Project Title	Freshwater Biodiversity Assessments in the Indo-Burma Biodiversity Hotspot: Fishes, Molluscs, Odonates, and Plants
Date of Report	26 November, 2012
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CEPF Region: Indo-Burma Biodiversity Hotspot

Strategic Direction: 1: Safeguard priority globally threatened species in Indo-China by mitigating major threats.

Grant Amount: US\$299,504.00

Project Dates: 1 September, 2009 to 30 September, 2012

Implementation Partners for this Project (please explain the level of involvement for each partner): The main project partners and their roles are listed below.

1) Freshwater Biodiversity Unit (FBU), Global Species Programme, IUCN, Cambridge (David Allen) The FBU led the project, coordinated partner inputs, provided technical inputs, including GIS-based distribution mapping training, and facilitated all project workshops (one training workshop (Cambodia), and two assessment expert review workshops (in Lao PDR and UK).

2) IUCN Country Liaison Office, Cambodia (Kong Kim Sreng)

The IUCN Cambodia office assisted in identifying regional expertise and in planning and coordinating the assessor training workshop, provided logistical support for the Lao PDR review workshop, and monitored the progress of the specialists contracted to prepare the biodiversity assessments. The Cambodia office maintains close links with local government departments (e.g. the Fisheries Administration and the Ministry of Environment) and other relevant stakeholders who will use the results of the biodiversity assessment data in regional development activities, and sent representatives to the training workshop. The liaison office in Cambodia will be responsible for ensuring that the results of the project are integrated into planning processes for conservation of wetland biodiversity and development plans in Cambodia.

3) IUCN Country Office, Lao PDR (Latsamay Sylavong)

The IUCN office in Lao PDR identified national expertise to undertake and to review the biodiversity assessments and hosted the assessment review workshop. They will also utilize their contacts with governmental agencies to integrate project outputs into wetland planning processes.

4) IUCN Asia Regional Office (IUCN ARO), Thailand (Robert Mather)

The Regional Office will led activities to transmit the relevant results of this project to regional and international media, to help strengthen public awareness of the conservation issues raised by the project, and ensure the results and recommendations are incorporated into regional programmes and policies, including through the IUCN-led Mekong Water Dialogues process.

5) Conservation International, Center for Applied Biodiversity Science (CI CABS), USA (Ian Harrison)

CI CABS assisted IUCN's Freshwater Biodiversity Unit in checking species lists for freshwater fishes and in the preparation and review of the final project report.

6) UNEP World Conservation Monitoring Centre (UNEP-WCMC), UK

UNEP-WCMC hosted the second of two biodiversity assessment expert review workshops, which focused on freshwater fish assessments.

7) World Wide Fund for Nature (WWF), Thailand Office (Chavalit Vidthayanon, WWF Thailand; regional Vice-Chair of the Species Survival Commission (SSC); regional representative of the IUCN-SSC/Wetlands International Freshwater Fish Specialist Group). Vidthayanon has significant expertise on the fishes of the Mekong River and he undertook a significant number of biodiversity assessments through this project. Vidthayanon also acted as a liaison with WWF's Mekong River projects, ensuring that data from those projects were incorporated into the biodiversity assessments (e.g., information on ecosystem services of the Mekong River's freshwater resources, and the threats present).

8) Center for Water Resources Conservation and Development (WARECOD), Vietnam

WARECOD participated in the biodiversity assessment review workshop held in Vientiane (Lao PDR), contributing key species distribution data, and information on key environmental threats within river drainages in Vietnam.

All stakeholders have received copies of the final scientific report and data, with IUCN ARO funding the production and dissemination of an additional 150 copies of the scientific publication. FBU disseminated copies to report chapter authors, IUCN programmes and some other key stakeholders, whilst ARO disseminated to stakeholders within the Indo-Burma region. IUCN FBU and ARO will continue to communicate and work with them with the aim of meeting the short and long term impacts of the project. Please see 'Annex 5' for the FBU report dissemination list.

Conservation Impacts

Please explain/describe how your project has contributed to the implementation of the CEPF ecosystem profile.

The project contributes to "Strategic Direction 2: improve the conservation of globally threatened species through systematic conservation planning and action." Before this project very little information on the conservation status of freshwater species in the Indo-Burma hotspot existed (although the western part of the Indo-Burma region (the Eastern Himalaya region) had been assessed through a concurrent IUCN assessment project (Allen *et al.* 2010). Prior to the commencement of the project, only 49 species of freshwater fish had been assessed according to the IUCN Red List (of which only 16 had been assessed as threatened), 103 Odonates (only five assessed as threatened), and no freshwater molluscs had been assessed for the IUCN Red List, resulting in significant underestimates of the total number of threatened species for these groups. In the CEPF Ecosystem Profile for the Indo-Burma region, recommendations for specific conservation outcomes for freshwaters (e.g., identification of Key Biodiversity Areas) were limited by the absence of compiled data on the distribution, conservation status and ecology of freshwater species.

This project has addressed this information gap that has until now has impaired conservation planning and policy decisions. Information on the distribution and ecological characteristics of all currently known and accepted species of freshwater fishes, molluscs, odonates and selected aquatic plant families throughout the core of the Indo-Burma biodiversity hotspot (encompassing focus species found within river basins from the Salween in Myanmar to coastal drainages of Vietnam, and from northern Thailand, Lao PDR and Vietnam to coastal drainages in peninsular Thailand) has been compiled, and their risk of extinction assessed according to the internationally recognized Criteria and Categories of threat defined in IUCN's Red List of Threatened Species (www.iucnredlist.org). This information can now be utilized to inform systematic conservation planning and action within the Indo-Burma region and will be essential for guiding environmental and development planning decisions that may impact the species present.

Please summarize the overall results/impact of your project.

The project has resulted in the production of a unique freely available dataset on the conservation status and distribution of all species of freshwater fishes, molluscs, odonates and selected families of aquatic plants in the Indo-Burma hotspot. An analysis of these data has been published in a freely available scientific report (Allen *et al.* 2012), there are limited hard copies (most already distributed), but a PDF version is available from the FBU website (www.iucn.org/species/freshwater), and all the Red List assessment data are available on the IUCN Red List website (www.iucnredlist.org). Capacity within the regional freshwater biodiversity scientific community has been strengthened by the training of 27 scientists, through their experience of the work undertaken for this project, and links made to the IUCN Species Survival Commission and to each other through this project. Awareness raising and application of the data to freshwater conservation planning has begun, with a successful press release and communications with relevant government bodies and stakeholders (with targeted distribution of the scientific report), including a presentation made to an international audience at the 2012 World Conservation Congress and associated media coverage.

Planned Long-term Impacts - 3+ years (as stated in the approved proposal):

The projected long-term impacts of this project include:

- Conservation of the biological diversity of the freshwater ecosystems of the Indo-Burma region.
- Provision of a scientific basis for the development of sustainable management practices for the freshwater ecosystems of the Indo-Burma region.
- Strengthening the work of IUCN and other project stakeholders in the development of polices for natural resource management for human well-being (specifically linking to IUCN's Water and Nature Initiative, and the Mekong Water Dialogue, which work towards the future management and protection of global water reserves for the future benefit of human livelihoods).
- Integration of the results of this project with terrestrial conservation and management plans, to create landscape scale plans for ecosystem management (specifically linking to Conservation International's landscape-scale conservation planning approach).
- Use of the project outputs by government departments in the region responsible for designation and management of Ramsar Wetlands of International Importance.
- Cross-sectoral application of the results to national development strategies and legislation (e.g., National Biodiversity Strategies and Action Plans) and multilateral agreements such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- Application of the assimilated species distribution data to species modelling techniques to predict areas that may be impacted by future threats, especially relating to changes in hydrological flows caused by direct human activity and by the effects of climate change.

Actual Progress Toward Long-term Impacts at Completion:

Progress has been made towards all Long-term Impacts. The final dataset, as well as the analyses and the scientific report are published and freely available, giving open and free access for policy makers, conservation and development agencies and other sectors within the region and across the world (see www.iucnredlist.org for species assessments, and www.iucn.org/species/freshwater for the final scientific report).

This dataset, along with continued institutional support from IUCN, provides a solid basis for future conservation planning for the freshwater systems of the Indo-Burma region. IUCN (Species Programme and IUCN ARO) will continue work to facilitate use of the project data to inform water management and development decisions, helping to safeguard the ecosystem services (including food security) generated by the freshwater biodiversity of the Indo-Burma region. This will involve continued communications with regional governments, other IUCN programmes (including the IUCN Water and Nature Initiative (WANI), and the IUCN-led Mekong Water Dialogues programme), members and partner organizations (including Conservation International). Key NGOs and government agencies related to freshwater conservation and development in the region have received copies of the scientific report, and IUCN ARO paid for the production of an additional 150 copies of the report for distribution within the region.

Publication of the project data on the IUCN Red List will help to inform existing IUCN partnerships such as with CITES, Ramsar, Convention on Migratory Species, and the UNESCO World Heritage, and also between IUCN and regional governments. Finally, based on experience from previous assessments, the data will most likely be used for further analysis or modelling by IUCN and third parties.

Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal):

- 1) This project will provide a database of information on the distribution, conservation status, threats, and livelihood values for 1,800 species of freshwater fishes, 300 species of freshwater molluscs, 700 species of dragonflies and damselflies, and 500 species of freshwater plants.
- 2) Regional professional development for conservation assessment, through the formation of a network of at least twenty specialists, mainly from within the Indo-Burma region, who are trained in the process of conducting rigorous biodiversity conservation assessments according to the internationally recognized methods of IUCN's species database and Red List of Threatened Species.
- Expansion of the global network of practitioners who form the core of IUCN's Species Survival Commission and have the competence to review and update IUCN's species database and Red List.
- 4) These outputs will provide an immediately available and significantly improved set of resources than has previously been available for conservation planning and sustainable management of freshwater biodiversity in the Indochina region of the Indo-Burma Biodiversity Hotspot.
- 5) The extensive, compiled information, will raise public and political awareness of the significant threats to freshwater species, particularly from large scale water resource developments.
- 6) The analyses of geographic patterns of species richness and endemism, and the livelihood values and threats for the species, will provide quantified measures of the geographic distribution and

severity of the threats, and will identify species at greatest risk of extinction and areas that are priorities for conservation.

- 7) This process will be supported by the proposed final workshop when the results of the project will be presented to key stakeholders from within the region. In this way the results of this project will inform long-term policy and planning decisions aimed at protecting priority conservation areas, promoting sustainable use, and supporting the livelihoods of human populations that rely on the freshwater resources (see Long-Term Impacts, above).
- 8) The project outputs will also be important for some more immediate conservation and management objectives, such as raising the capacity for nations of the Indochina region of the Indo-Burma Biodiversity Hotspot to meet the targets set by the United Nations Development Programme for the Millennium Development Goal 7 ("Ensure environmental sustainability"), and meeting the obligations of the Convention on Biological Diversity, in particular the 2010 Target (ratified by Vietnam and Thailand).

Actual Progress Toward Short-term Impacts at Completion:

Impacts 1, 2 and 3 have been met. Following the Red List and GIS mapping training workshop (November, Phnom Penh, Cambodia) 27 species experts, most from within the region, are now trained in the application of the IUCN Red List Categories and Criteria and in species mapping using GIS software (ESRI ARC View software and licenses were provided to workshop participants). These experts are now capable of passing on their expertise in peer-to-peer training. The IUCN Freshwater Fish Specialist Group is expanding its network of members beyond a core group, and some of the assessors have expressed an interest in joining. Overall number of species assessed through the project are lower than estimated in the project proposal (freshwater fishes - 1.178, freshwater molluscs -430, dragonflies and damselflies - 473, and species from selected families of freshwater plants - 252). These over-estimates are due primarily to the poorly studied nature of freshwater biodiversity within the Indo-Burma region, both in terms of species-level taxonomy, and species distributions. In the case of freshwater fish, significant numbers of species have been described, the taxonomic validity of which could not be substantiated by the experts participating in this project, and these species were removed from the assessment. Due to difficulties identifying suitable experts with knowledge of aquatic plant taxonomy and ecology within the region, a limited set of aquatic plant families were assessed, however the opportunity to include freshwater crabs was taken as an additional taxonomic group.

Impacts 4, 5, and 6 have been met through the analysis and publication of resulting datasets for all known, valid species of freshwater fishes, molluscs, odonates, and aquatic plants from selected families including the species Red List assessments, published on the IUCN Red List website and GIS species distribution maps. The analysis, published in a freely available report (hard copy and downloadable pdf), shows the levels of threat faced by each group, threats facing each species, areas of high density of threatened species, endemism and data deficiency, livelihood values and the identification of proposed freshwater Key Biodiversity Areas.

Impact 7 has been substantially met. Funding for the proposed final stakeholder workshop (Deliverable 5.1) was not obtained and the workshop did not take place. However the opportunity was taken to hold an event to present the project outputs at the 2012 World Conservation Congress to a diverse audience. Awareness of project outputs was raised through significant media coverage generated through the WCC session and through a separate press event coordinated by IUCN ARO. The latter was attended by thirty journalists and other participants attended, with representatives from the following media present; ITN Channel 4 News (UK), Bangkok Post (Thailand), AFP (France), Radio Free Asia, Voice of America (USA), Asahi Shimbun (Japan), Nation Channel (Thailand), Australia Associated Press and AI Jazeera (Asia), with a subsequent interview with ABC Australia. NGO and other participants represented included the Asian Development Bank, Embassy of Finland, Embassy of Sweden/SIDA, USAID, International Rivers, Interpol Environmental Crime, the Asia Foundation, Stockholm Environment Institute, Mekong Energy and Ecology Network, PTTEP (oil exploration company, Thailand), Freeland Foundation (Thailand), and Ramboll (international civil engineering company).

Good progress has also been made towards Impact 8 through the actions taken the above Impacts. However these Impacts will be further developed through the continued interactions between IUCN and the relevant stakeholders over the next few years. The assessment is mentioned in the current draft of the Vietnam National Biodiversity Strategies and Action Plan (NBSAP), the principal instrument for implementing the Convention on Biological Diversity at the national level (Article 6).

Please provide the following information where relevant:

Hectares Protected: Not applicable Species Conserved: Not applicable Corridors Created: Not applicable

Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives.

The project has achieved, or made good progress towards achieving all of its impact objectives. Key challenges encountered over the duration of the project include;

- Identifying experts with the skills and knowledge required to undertake the work expected of
 assessors (compilation of assessment data, mapping and report writing). Experts contracted by the
 project to undertake species assessments required a reasonable level of spoken and written
 English, a good level of general computer skills, and access to a reliable internet connection.
 Although all experts received training in the basic GIS mapping skills required to produce GIS
 shapefiles showing a species distribution, few were able to submit shapefiles; in reality, FBU staff
 digitised hand-drawn maps supplied by assessors, or produced digital maps based on the
 distribution data provided with a species assessment; maps produced in this way were sent to
 experts for review.
- Sufficient numbers of experts willing to take on the species assessment work could not be identified for all groups. A significant proportion of the fish (mainly the Least Concern and Data Deficient species) and plant assessments had to be undertaken by FBU staff, which were then peer reviewed by relevant experts by email correspondence.
- Ensuring that assessors completed assigned tasks on time.

However there have been many successes including the excellent engagement of many of the assessors in the project work and their sense of ownership of the data and the scientific report, exhibited through the willingness of many of the assessors to write chapters for the report.

The press release of the project findings, and the presentation at the World Conservation Congress were also great successes, receiving widespread national and international coverage in both English and regional languages. The report itself has also received many favourable comments from people who have received it.

Many challenges remain if we are to get the data used to inform conservation and development decisions by different stakeholders, as shown by the recent decision by the government of Lao PDR to progress with the Xayaburi hydropower dam construction on the Mekong, but IUCN will continue to work with stakeholders towards achieving these impacts.

Were there any unexpected impacts (positive or negative)?

Through the generosity of ESRI, IUCN were able to provide all the training workshop participants with free ESRI ARC View GIS software along with training in its use.

One unexpected benefit of the project was enabling biologists from within the region to meet – often for the first time – other workers from within the region and internationally. The training and review workshops allowed experts to exchange data, literature (especially valuable where access to international scientific literature is limited by high economic cost and poor internet access) and experiences. The benefits to individuals' professional development and to conservation more generally cannot be overestimated.

Project Components

Project Components: Please report on results by project component. Reporting should reference specific products/deliverables from the approved project design and other relevant information.

Component 1 Planned:

Professional capacity to assess the status of freshwater biodiversity increased within CEPF's Indo-Burma Biodiversity Hotspot, through training on the use of the data entry system (IUCN's 'Species Information Service' [SIS]) for IUCN's species database, and the use of IUCN's Red List Categories and Criteria.

Component 1 Actual at Completion:

Twenty-seven conservation biologists from the region and internationally were trained in the data entry system (IUCN's 'Species Information Service' [SIS]) for IUCN's species database; (ii) application of the IUCN Red List Categories and Criteria to evaluate the risk of extinction to species at global and regional scales, and (iii) to create digital species distribution maps. This was conducted at the Red List training workshop held November 2009 in Phnom Penh, Cambodia.

Component 2 Planned:

A repository of information made widely and freely available and summarizing the taxonomy, distribution, ecology, utilisation, livelihoods values, threats, conservation measures (in place and/or needed), and associated bibliographic citations for freshwater fishes (1,800 species), molluscs (300 species), Odonates (700 species), and selected freshwater plant species (500 species) for the Indo-Burma Biodiversity Hotspot.

Component 2 Actual at Completion:

A dataset of all Indo-Burma freshwater fishes (1,178 species), molluscs (430), Odonates (473), aquatic plants from selected families (252) and crabs (182) have been produced. The species assessments (including the taxonomy, distribution, ecology, utilisation, livelihoods values, threats, conservation measures (in place and/or needed), and associated bibliographic citations) is published on the IUCN Red List website (www.iucnredlist.org). All species distribution ranges, mapped to HydroSHEDS subcatchments (as shapefiles) are available currently via contact with FBU. The distribution maps will become available on the Red List website (IUCN are currently moving away from static image maps towards an interactive mapping system called 'Species Browser), however technical issues around storing HydroSHEDS-based shapefiles need resolution before this can happen, an issue that is being worked on at present, and the freshwater species data, including that for the Indo-Burma region, will be added as soon as possible.

Component 3 Planned:

Risk of extinction assessed (according to internationally recognized Categories and Criteria of threat set out by the IUCN Red List) and made widely and freely available, for all freshwater fishes, molluscs, odonates, and selected freshwater plant species for the Indo-Burma Biodiversity Hotspot.

Component 3 Actual at Completion:

The risk of extinction has been assessed for all species according to the IUCN Red List Categories and Criteria v3.1 and the results are freely available on the IUCN Red List website (www.iucnredlist.org).

Component 4 Planned:

Priority areas for conservation (Key Biodiversity Areas) identified, ecosystem service value of freshwater habitats described, and information made widely and freely available via the IUCN Red List and associated publications.

Component 4 Actual at Completion:

Freshwater Key Biodiversity Areas have been proposed for all freshwater taxonomic groups assessed through the project (according to the methodology in Holland *et al.* 2011), and the socio-economic values of Indo-Burma freshwater species have also been assessed. These findings are published in the scientific report (Allen *et al.* 2012).

Component 5 Planned:

Key stakeholders in the Indochina region of the Indo-Burma Hotspot advised on the results of the freshwater biodiversity assessments and possibilities for applying these data to conservation planning and sustainable management of freshwater biodiversity in the Hotspot. This activity is dependent upon success in raising the co-finance from Anova.

Component 5 Actual at Completion:

This activity did not take place as co-financing was not obtained. However a successful event was held at the 2012 World Conservation Congress in South Korea attended by NGOs and policy makers from throughout the Indo-Burma region.

Were any components unrealized? If so, how has this affected the overall impact of the project?

Two components not were not fully realised; **Product/Deliverable 2.3: Digital (GIS-based) maps distributed via the internet and CD)** and **Component 5 (Product/Deliverable 5.1: Stakeholder workshop)**. All the distribution maps (as static jpeg images) have been created and added to the data DVD included in the published report. However the IUCN Red List is moving away from static image maps towards an interactive mapping system (called 'Species Browser'. The Indo-Burma freshwater species data (in fact all Red List freshwater species data) are currently waiting on a GIS dataset (HydroSHEDS) to be finalised which allows the freshwater species distributions to be displayed in the Species Browser, and all freshwater species distribution data (including that for the Indo-Burma region) will be made available through the Species Browser once this process is completed.

Co-financing was not obtained to undertake the stakeholder workshop (Product/Deliverable 5.1), however outputs from the Indo-Burma project were presented at an event held at the 2012 World Conservation Congress, and through ongoing activities of the IUCN ARO office, especially the Mekong Water Dialogues programme.

Please describe and submit (electronically if possible) any tools, products, or methodologies that resulted from this project or contributed to the results. We will submit the following Annexes to this report:

- Copies of the final scientific report and full dataset on DVD already submitted to CEPF
- PDF Annex 1 IUCN Red List training workshop participant list
- PDF Annex 2 IUCN Red List assessment review workshop 1 report participant list
- PDF Annex 3 IUCN Red List assessment review workshop 2 (fish) participant list
- PDF Annex 4 Press release and coverage
- PDF Annex 5 Report distribution list (FBU)
- PDF Annex 6 and 7 (low and high resolution) of the final scientific report

Lessons Learned

Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building. Consider lessons that would inform projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.

Project Design Process: (aspects of the project design that contributed to its success/shortcomings)

The project design was led by Ian Harrison (at the time, a joint FBU/CI CABS staff member), with direct input from William Darwall (FBU) and in consultation with all other key stakeholders. In general the process worked well, however the need to consult across all key stakeholders across several time zones introduced delays at some points.

Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)

One key factor that changed between the design phase and implementation phase of the project was introduction of an updated Species Information Service (SIS) database, the database that assessors use to compile species information and to write conservation assessments. SIS moved from a PC based database to internet based, requiring assessors to have a reliable internet connection, and at the same time the data requirements for assessments increased, with additional information fields, and a higher level of data content required to support assessments. These changes combined to make individual assessments much more time consuming for assessors, and greatly increased the time required by FBU staff to consistency-check assessments prior to submission to the Red List. In addition, a great deal of time was spent editing assessments to bring them up to a good standard of English; note that this is not a criticism of the assessors – the Red List only supports assessments in the English language at present.

A further issue that added to demands on the time of FBU staff was the inability of many assessors to use GIS software to produce digital species distribution maps. In some cases assessors were unable to make the software work on their computers (due to the low specification of their computer, software conflicts, or ESRI software licence issues), whilst in other cases, assessors were unable to use the software. In general we over estimated our ability to train assessors in GIS software during a relatively brief training workshop. Some of these issues are being addressed by developing an internet-based and user-friendly 'freshwater species mapping tool' which will be in place for future assessment projects, however assessors shall still need access to a reliable and high speed internet connection.

The above issues were exacerbated by the large number of species to be assessed and reviewed, especially for fishes, where a second assessment review workshop was held in the UK.

Other lessons learned relevant to conservation community:

Additional Funding

Provide details of any additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of the CEPF investment in this project.

Donor	Type of Funding*	Amount	Notes
IUCN Asia Regional Office	A	\$914.35	Additional reports produced and disseminated within the region.
	A	\$ -	ARO staff time to coordinate regional media activities at the World Conservation Congress and the media release in Thailand has not been quantified.
IUCN Species Programme	A	\$19,941	Additional funding from IUCN Species for staff time to undertake additional species distribution map production and species assessment editing and review.
			Additional administrative and finance staff time from IUCN Species was contributed as a result of the project duration extension, however this has not been quantified.
European Commission funded HighARCS project	A	?	A number of species assessments were contributed to by scientists under the HighARCS project (www.higharcs.org) and the attendance of HighARCS specialists at the Red List review workshops were paid for by the HighARCS project. The amount of funds this contributed to the Indo- Burma project is unknown.

*Additional funding should be reported using the following categories:

- A Project co-financing (Other donors or your organization contribute to the direct costs of this project)
- **B** Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF funded project.)
- **C** Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)

Sustainability/Replicability

Summarize the success or challenge in achieving planned sustainability or replicability of project components or results.

The key successes are the twenty seven species experts, most from different institutions (government and non-government) from within the Indo-Burma region, that were trained in the application of the IUCN Red List Categories and Criteria at the week-long training workshop, giving them the skills to pass on this knowledge to others within their institutions. Since completion of the assessment phase of the project, experts have continued to submit assessments for newly described species, suggesting that capacity for undertaking Red List assessments has been developed.

The assessments made through this project will be combined with other regional assessments, including for the Eastern Himalaya and Western Ghats hotspots, allowing for the production a wider south Asian regional analysis. They are also part of the "Global Freshwater Biodiversity Assessment" initiative developed by the IUCN Freshwater Biodiversity Unit in collaboration with Conservation International, and therefore will be integrated into Conservation International's 'Freshwater Initiative and Ecosystem Services' programme, which informs freshwater policy decisions in support of human well-being at regional and global scales.

Outputs of this project will directly input to the European Commission funded *BioFresh* project (www.freshwaterbiodiversity.eu) and will be made available as significant components within the information portal to be maintained as a key information source on freshwater biodiversity for the foreseeable future – IUCN is a partner in this project.

A key challenge will be to take the potential freshwater Key Biodiversity Areas (KBA) identified through this project to ratification, i.e., through the final step of regional stakeholder workshops that will confirm those species that require site-based conservation actions (i.e. benefit from a KBA designation) and to define their delineation.

Another challenge will be to ensure that the information produced through this assessment is integrated by IUCN and the project partners into their current work activities and stakeholder relationships. This will ensure that the results of the assessments are properly used in regional, national, and local guidelines for integrated wetlands management, including conservation of freshwater biodiversity, and used in development plans in the priority corridors. Project outputs will also be of immediate value to government departments throughout the region responsible for designation and management of Ramsar Wetlands of International Importance.

Given that the new CBD targets agreed at Aichi in 2010 specify in Target 11 "By 2020, at least 17 per cent of terrestrial and inland water areas, and 10 per cent of coastal and marine areas, **especially areas of particular importance for biodiversity** and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes" it is hoped that regional governments will act to ensure that the KBA sites identified through this project are sustainably managed.

Summarize any unplanned sustainability or replicability achieved.

Safeguard Policy Assessment

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project. Not applicable.

Additional Comments/Recommendations

Not applicable.

Information Sharing and CEPF Policy

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, www.cepf.net, and publicized in our newsletter and other communications.

References

Allen, D.J., Molur, S. and Daniel, B.A. 2010. *The Status and Distribution of Freshwater Biodiversity in the Eastern Himalaya*. IUCN, Cambridge.

Allen, D.J., Smith, K.G. and Darwall, W.R.T. 2012. *The Status and Distribution of Freshwater Biodiversity in Indo Burma*. IUCN, Cambridge.

Holland, R.A., Darwall, W.R.T. and Smith, K.G. 2011. Conservation priorities for freshwater biodiversity: the Key Biodiversity Area approach refined and tested for continental Africa. *Biological Conservation* **148(1):**167-179.

Please include your full contact details below:

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If your grant has an end date other than JUNE 30, please complete the tables on the following pages

Performance Tracking Report Addendum

CEPF Global Targets

1 September, 2009 to 30 September, 2012

Provide a numerical amount and brief description of the results achieved by your grant. Please respond to only those questions that are relevant to your project.

Project Results	Is this question relevant?	If yes, provide your numerical response for results achieved during the annual period.	Provide your numerical response for project from inception of CEPF support to date.	Describe the principal results achieved from July 1, 2012 to September 30, 2012. (Attach annexes if necessary)
1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.	N / A			Please also include name of the protected area(s). If more than one, please include the number of hectares strengthened for each one.
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	N / A			Please also include name of the protected area. If more than one, please include the number of hectares strengthened for each one.
3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares.	N / A			
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	N / A			
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1below.	N / A			

If you answered yes to question 5, please complete the following table

ioeconomic Benefits to Target Communities

this table if your project provided concrete socioeconomic benefits to local communities. List the name of each community in column one. In the subsequent co y Characteristics and Nature of Socioeconomic Benefit, place an X in all relevant boxes. In the bottom row, provide the totals of the Xs for each column.

	Со	mm	unit	ty C	hara	actei	ristics		Nature of Socioeconomic Benefit											
unity				S			ЭГ	Other	Increased Income due to:				le Ible ter	ter	other g, c.			, u	l Ital	÷ 3
	Small landowners	Subsistence economy	Indigenous/ ethnic peoples	Pastoralists/nomadic peoples	Recent migrants	Urban communities	Communities falling below the poverty rate		Adoption of sustainable natural resources management practices	Ecotourism revenues	Park management activities	Payment for environmental services	Increased food security due to the adoption of sustainable fishing, hunting, or agricultural practices	More secure access to water resources	Improved tenure in land or other natural resource due to titling, reduction of colonization, etc.	Reduced risk of natural disasters (fires, landslides, flooding, etc)	More secure sources of energy	Increased access to public services, such as education, health, or credit	Improved use of traditional knowledge for environmental management	More participatory decision-
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"Other", please provide detail on the nature of the Community Characteristic and Socioeconomic Benefit:																				