

# CEPF FINAL PROJECT COMPLETION REPORT

<b>Organization Legal Name:</b>	Conservation International-China - 保护国际
<b>Project Title:</b>	<b>Refining Conservation Outcomes for the Southwest China Hotspot</b>
<b>Date of Report:</b>	February 28, 2007
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**CEPF Region:** Mountains of Southwest China (Multiple),

**Strategic Direction:** 1.Developing and operationalizing Hotspot wide monitoring and evaluation  
**Grant Amount:** \$323,478

**Project Dates:** Apr 1, 2004-Dec 31, 2006

**Implementation Partners for this Project (please explain the level of involvement for each partner):**

Peking University (provided data, assembled and analyzed data, processed satellite images, held workshop, and maintain Eco-partners Network), Birdlife International (provided and reviewed data), Sichuan Forest Academy (provided and reviewed data), Institute of Zoology - Chinese Academic of Science(Provided data), Chengdu Institute of Biology - Chinese Academic of Science (provided and reviewed data), Sichuan University (provided and reviewed data), Xihua Normal University (provided and reviewed data), Harvard University (provided data),Sichuan Forest Department(provided data), The Nature Conservancy (provided data)

## Introductory Remarks

Conservation International (CI) and the Critical Ecosystem Partnership Fund (CEPF) use "conservation outcomes" as the scientific underpinning for focusing conservation investment geographically and thematically. These conservation outcomes comprise the effective conservation of a set of species, sites, and broader-scale corridors that is essential for preventing biodiversity loss. Identifying these outcomes for South West China ensures that conservation action focuses on the species at the greatest risk of extinction, and on the sites and landscapes that are most important for their protection. These also provide a baseline upon which a systematic approach to monitoring can be set in place. This monitoring approach, termed "outcomes monitoring", will permit the objective comparative assessment of conservation results against which the success of investments can be measured, and will also serve to build donor trust and improve on-the-ground conservation efforts.

Conservation outcomes at the species level are those that are globally threatened with extinction, meeting the criteria of Critically Endangered, Endangered or Vulnerable according to the IUCN Red List of Threatened Species. According to the 2004 Red List, there are 393 threatened species in SW China. Outcomes at the site level are sites of global biodiversity conservation

significance, “key biodiversity areas” (KBAs), that are actually or potentially manageable for conservation. A total of 141 KBAs were identified for threatened amphibians, mammals, birds, reptiles, and freshwater fish, as well as for restricted-range and congregatory birds, using confirmed locality data for each target species. In addition, 58 sites have been identified as Candidate KBAs, or research priorities; if additional data or surveys confirm the presence of target species within these sites, they too will become priorities for conservation action (KBAs).

## **Conservation Impacts**

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

The Outcomes project contributes to the implementation of the CEPF ecosystem profile in a number of ways. The identification of species, site, and landscape level targets for conservation is a part of all current CEPF ecosystem profiles. Since the Mountains of Southwest China profile was developed during an earlier funding cycle, the process of target identification was conducted after CEPF funding was open in the region. However, these targets should be used to direct funding for future projects in the hotspot. These targets and the data gathered regarding them will also help guide research, investment and decision-making by the government and NGOs in the region.

***Please summarize the overall results/impact of your project.***

The Outcomes project has been completed very successfully for the hotspot and for surrounding areas of Southwest China; as can be seen on the KBA and forest change maps, the area of analysis for this project was significantly larger than the Mountains of Southwest China Biodiversity Hotspot. Together, the biodiversity conservation targets, the forest change map, and the data on core indicators provide a basis for future strategic planning and conservation investment in the region. By successfully engaging partners throughout the process, we have built a strong foundation on which to communicate and utilize the findings of this project.

To date, major successes associated with the project include the following:

1. The establishment of the Eco-partners Network (described below), which became the basis for data sharing in the region. Over 100,000 species records have been contributed through the partnership. Additionally, members of the network are contributing to surveys and monitoring efforts in the region.
2. Collaboration between CI and TNC, WWF, WCS and other organizations has been greatly enhanced. Chinese scientists and conservation officers now have a better understanding of conservation planning, and are more enthusiastic about collaborating on conservation initiatives. Outcomes data and results are being used to inform the conservation priorities identified through the multi-million dollar TNC Blueprint project.
3. The CI-China team gained capacity in KBA delineation, and will use this expertise in future work, including through a collaboration with Birdlife International (described below).
4. The CI-China team also gained capacity and developed innovative methods in forest change detection. The team plans to extend this work to a bigger area in the near future.
5. The project provided partners with valuable lessons in the identification of biodiversity conservation targets, and in using these data to inform conservation actions on the ground, and contributed to partner’s practice.
6. Results from the outcomes project were used to develop a number of follow-up projects. Projects include surveys in areas where there were data gaps. Monitoring programs were developed in nature reserves and community areas to provide up-to-date conservation data. Management Information Systems were built in nature reserves based on outcomes definition and monitoring data requirements (based on the Access version of the outcomes database).

Finally, species-level data gaps identified through the outcomes definition process have been provided as recommendations to WWF's small grant program and TNC's Blueprint project.

7. The data sharing protocol developed through the outcomes monitoring work is now being used as an important reference by other organizations.

As outcomes data are distributed more widely, this list will continue to grow.

As stated in the "Introductory Remarks" section above, biodiversity conservation targets were successfully identified at the species, site, and landscape/corridor scales. A total of 393 globally threatened species are found in the target area; 141 KBAs and 58 Candidate KBAs were identified and delineated for these species and for restricted range and congregatory birds. These targets will continue to be refined as more data become available. Additional reference studies are already being undertaken by CI-China to fill some of the remaining data gaps. Over the next year, refinement work will be undertaken through a BP funded project, to be carried out in collaboration with Birdlife International. This project includes the refinement of KBAs in SW China, but additionally includes the delineation of Important Bird Areas (IBAs) and Alliance for Zero Extinction (AZE) sites throughout China. BP funding was approved in part because of the results of the outcomes project, and because of the resulting strong links with Birdlife. Similarly, we will be able to leverage the strong partnerships developed through the outcomes projects into collaborative fundraising initiatives for conservation projects on target species and sites, and to ensure the sustainability of monitoring initiatives.

A central success of the SW China outcomes project was the establishment of the Eco-partners Network, a consortium of institutions and conservationists working on biodiversity conservation in China, including government officials, scientific institutions and nature reserves, as well as TNC, WWF, WCS, CI and numerous local NGOs. The Eco-partners Network aims to promote the dissemination of biodiversity data, and to move forward monitoring work in the region in a coordinated and collaborative manner. The network will provide data on conservation and development policies of Southwest China, and facilitate scientific decision-making and enhance public awareness. Members of the network have agreed to share information and resources with each other, in a major step forward for biodiversity conservation and research in China. Within the network, partners will share data, integrate resources, accumulate biodiversity knowledge and ultimately develop a collective vision for how best to conduct biodiversity conservation in SW China. We hope to use the strength of the Eco-partners Network to build financial and technical capacity to enable the establishment of a sustainable, standard biodiversity data system for SW China.

Furthermore, the forest change map will prove an invaluable tool for decision makers and scientists in the region. This analysis confirmed very slow rates of forest clear cutting from ~1990 to ~2000. It also indicated very high levels of fragmentation of remaining forests. The analysis results formed part of the base information for delineation of KBAs, and is now being used by partners in the refinement of species extent maps.

#### **Long-term Impacts Planned - 3+ years (no more than 150 words):**

At least half of our conservation outcomes defined by this project are achieved by the conservation community including government by 2030 for the Southwest China Hotspot.

The foundation is now solidly in place for reaching this ambitious target. There is strong interest in the conservation outcomes among government and other partners in the region, and work to conserve biodiversity targets identified through this project is already underway, led by a range of institutions (see above). Furthermore, the planned integration of the KBAs and species outcomes into the The Nature Conservancy's Blueprint Project means that we should be able to obtain the endorsement of the Chinese government.

**Short-term Impacts Planned - 1 to 3 years (no more than 150 words):**

Government, NGOs, and donors target conservation investment, implementation, and monitoring toward globally threatened species, key biodiversity areas, and biodiversity conservation corridors within the Southwest China Hotspot.

**Progress Towards Short-term Impacts at Completion – (no more than 150 words)**

Significant progress has already been made towards this goal, with investment by a number of partners. As stated above, follow up projects to date include:

- Surveys in areas where there were data gaps.
- Monitoring programs in nature reserves and community areas to provide up-to-date conservation data.
- Management Information Systems built in nature reserves based on outcomes definition and monitoring data requirements.
- Species-level data gaps identified through the outcomes definition process have been provided as recommendations to WWF's small grant program and TNC's Blueprint project.

Conservation International and partners will continue to focus future investment on globally threatened species, KBAs, and landscape-scale conservation within the region.

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

The Outcomes project took longer to complete than initially expected. The delays were due to the time needed for data compilation, methods development, data review by partners, ground-truthing of change detection work, etc. Similar factors led to delays in completing outcomes projects in other regions. We now know that a more realistic time frame for such work is two to two and a half years. Work on publications and the dissemination of results will take additional time. Now that a baseline portfolio of products has been generated we are armed with the necessary information to conduct a comprehensive dissemination strategy through the development of publications and conducting follow-up meetings with key audiences.

***Were there any unexpected impacts (positive or negative)?***

No.

**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:**

Outcomes refinement and monitoring program is defined in collaboration with partners.

**Component 1 Actual at Completion:**

Outcomes refinement and the establishment of a monitoring program were undertaken in collaboration with numerous partners. Establishment of Eco-partners Network of NGOs, Nature Reserve practitioners and government personnel acts as a means to bind partners and agreed upon goals and objectives together.

**Component 2 Planned:**

Databases assembled and integrated to enable outcome refinement and mapping of targeted areas in SW China hotspot.

**Component 2 Actual at Completion:**

The Access-based outcomes database was used for outcomes definition, along with other databases used by CI-China staff. Mapping of KBAs was conducted using GIS.

**Component 3 Planned:**

Full set of species-level targets for achieving conservation outcomes defined and documented for the Southwest China hotspot, with specific conservation interventions identified for each species outcome.

**Component 3 Actual at Completion:**

A total of 393 globally threatened species were identified as occurring in Southwest China, and documented in the Access-based outcomes database.

**Component 4 Planned:**

Full set of site-level targets for achieving conservation outcomes defined and documented for the Southwest China hotspot, with specific conservation interventions identified for each site outcome.

**Component 4 Actual at Completion:**

A total of 141 KBAs were identified for threatened amphibians, mammals, birds, reptiles, and freshwater fish, using confirmed locality data for each target species. KBA boundaries were delineated based on information on the habitat requirements of species, along with data on land management units (protected area boundaries). In addition, 58 sites were identified as Candidate KBAs, or research priorities; if additional data or surveys confirm the presence of target species within these sites, they too will become priorities for conservation action (KBAs).

**Component 5 Planned:**

Conservation outcomes analyzed and prioritized to guide decision-making grant making, choice of site-based project implementation, research projects for CI programs, donors, and broader conservation community.

**Component 5 Actual at Completion:**

A total of seven Alliance for Zero Extinction sites have been identified in Southwest China. These AZE sites are the highest priorities for conservation investment in the region, since they hold 95 percent or more of the global population of one or more Critically Endangered or Endangered species. A more in-depth prioritization of KBAs is planned for later this year, when more data become available regarding threats and opportunities within each site.

**Component 6 Planned:**

Outcome Monitoring is planned and a detailed work plan for implementing Outcome Monitoring is developed and submitted in a follow-up proposal to CEPF and other to-be-identified donors to support monitoring implementation. The strategy to maintain funding for

**Component 6 Actual at Completion:**

Two monitoring related workshops were held in China, the first in October 2004 and the second in April 2005. The first workshop focused on socializing partners to the outcomes process and discussing ongoing monitoring initiatives. The second workshop focused on expert review of the biodiversity data and initial work plan and fundraising strategy development. The workshops provided an opportunistic forum for holding previously sensitive conversations, such as concerns regarding data sharing. The workshops provided a forum for participants to discuss sensitive or controversial topics and to rapidly reach consensus on key points.

Specific decisions made at the workshop included how to best manage and disseminate metadata on public forums such as websites, and forming an Eco-partners Network that would oversee the collection, analysis and reporting of regional monitoring data. This formal network is now made up of NGOs, academic institutions, biologists and community and Nature Reserve representatives. Although some government agencies are represented, the Eco-partners have elected to remain separate from the government in order to better serve as a biodiversity advisory committee to the government. The Eco-partners Network is now formally established for SW China, and continues to play a key role in data sharing, awareness-raising, fundraising, and generally conducting and promoting biodiversity conservation monitoring efforts in the region. To complement the baseline portfolio of data generated by the project (Red List Index, Change in protected status of KBAs, Change in habitat cover within KBAs, Fragmentation of landscapes), further monitoring data collection projects are now underway. These related efforts not only intend to contribute to developing a more cohesive and standardized monitoring framework across SW China but also aim to generate additional information layers that will only strengthen the value of the monitoring data collected on target species and within high priority sites and landscapes in the region. These additional initiatives being led by Conservation International and Peking University include:

- 1) Training community members in monitoring techniques at selected Nature Reserves focusing on species and ecosystem services (GEF socio-economic surveys, economic chains, building and managing databases, identifying key resources for local people).
- 2) Community based monitoring in Qinghai, recording species and habitats (general qualitative observations).
- 3) Facilitating learning exchanges for nature reserve managers on monitoring techniques presently used in different reserves, and providing support to develop standard databases across the network of nature reserves in SW China. This initiative is intending to align nature reserve database with the outcomes data management system, so that information collected meets long-term outcomes refinement and monitoring data needs.
- 4) Protected area data collection effort currently underway in Sichuan Province in partnership with the Sichuan Forestry Department. Protected area surveys are being conducted to establish baseline on the level of management, governance, staffing and financing in place within currently protected Key Biodiversity Areas.

**Component 7 Planned:**

Forest cover change analysis and production of a change detection map for hotspot (1990-2000-2005) as part of the global Outcome Monitoring protocol.

**Component 7 Actual at Completion:**

A forest cover and clearance map was produced for Southwest China, including the Mountains of Southwest China Biodiversity Hotspot and adjacent areas. This product establishes baseline forest cover for 1990 as well as forest clearance between 1990-2000. The map was produced by directly comparing and analyzing Landsat satellite imagery from circa 1990 (+/- 3 years) with satellite imagery from circa 2000, and directly measuring habitat loss between the two dates. The overall rate of forest clearance from 1990-2000 across the hotspot was 1.1% with the highest rate in Qinghai Province (3.2%).

The map was validated with several thousand field data points collected by the CI-China team, with an overall accuracy of 88% (for the circa 2000 data). Additional analyses for 2000-2005 are currently underway for high priority regions, with additional field data collection scheduled for March 2007.

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

All of the planned project deliverables have been completed. KBAs were identified for globally threatened species of vertebrates, as well as for restricted-range and congregatory birds. Data on threatened and restricted-range plants and invertebrates, as well as non-avian restricted-range vertebrates will be incorporated as data become available. The 141 of KBAs that have been identified represent a robust baseline for site-level investment and monitoring; the incorporation of data on other taxonomic groups is not expected to significantly increase the number of sites.

Additionally, no discrete biodiversity conservation corridors were mapped; this results from advances in the methods used for identifying conservation targets at the landscape scale. For Southwest China, a list of species that require conservation action beyond the site scale was compiled. The area requirements for two of these area-demanding species (the golden monkey and giant panda) were mapped in using GIS. Further work is planned on identifying landscape-scale targets and actions.

***Please describe and submit (electronically if possible) any tools, products, or methodologies that resulted from this project or contributed to the results.***

All products will be submitted on a CD and as hard copies. Products include a large format change detection map, a large format KBA map, the Access-based outcomes database, monitoring workbooks, Eco-partner Network materials.

## **Lessons Learned**

***Describe any lessons learned during the design and implementation of the project. 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.***

The engagement of partners has been essential. In particular, the involvement of government departments and universities has been critical to gaining buy-in within the region. Engaging other large NGOs working in the region, such as TNC and Birdlife International, has also contributed to the success of this project.

Though this work is (and must remain) based on globally standard methods and criteria, some level of flexibility was required to account for regional variation in data availability and the local context. For instance, the outcomes definition process for SW China highlighted the need for flexibility in KBA delineation rules: KBAs in China need, in most cases, to be divided by county boundary to be most effectively managed.

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

The proposed time frame was too short. This type of project, if planned in other regions, should be allowed a two to two and a half year time frame. A KBA review workshop should be held about 1.5 years into the project, to allow for validation and input from stakeholders. Given the longer time frame, more funding was needed for this project than initially anticipated. In future projects, funding should also be built in for publications to help disseminate the results (such as KBA booklets or directories). Additional funding is also needed to include the most recent data and analysis in the forest cover and clearance maps. The Landsat satellite imagery for 1990-2000 is freely available, but to conduct the analyses for 2005/6, the data must be purchased. The cost of this varies depending on the size of the area to map, but for an area as large as the Mountains of SW China hotspot, the cost would be in the tens of thousands of dollars. Such analyses are important to ensure that the most relevant and timely data are available to decision makers and planners and therefore this money should be included for future projects.

In addition, we learned the importance of discussing project design and steps with all parties, and reaching agreement prior to beginning data collection and analysis, thereby improving efficiency.

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

The key to gaining buy-in has been building partnerships, information dissemination, and continued dialogue. The establishment of the Eco-partners Network and the commitments made by partner institutions will now serve as a mechanism to build increasing momentum for long-term conservation and monitoring of the highest priority species, site and landscapes within the SW China Hotspot.

**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.***

<b>Donor</b>	<b>Type of Funding*</b>	<b>Amount</b>	<b>Notes</b>
EU China Biodiversity Programme	Grantee and partner leveraging	\$171,319	Invited to 3 <sup>rd</sup> round; pending proposal for project period of 3 years
Conservation Synthesis, CABS (CI)	Project co-financing	\$20,000	Salary, Travel
CI-China	Project co-financing	\$30,000	Salary, other resources
Outcomes Monitoring, PPC (CI)	Project co-financing	\$24,000	Salary and collection of additional monitoring data
GIS Lab, CABS (CI)	Project co-financing	\$2,400	Salary for map production

***\*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.***

Since this project is based on CI's standard methodology for identifying and monitoring conservation targets, the results should be highly replicable. The key to ensuring replicability has been documenting steps and decisions. For instance, notes regarding the delineation of KBAs will allow others to come up with very similar results if the process were repeated using the same data sets. Similarly the lessons and experiences we captured in conducting the workshops and establishing the Eco-partners Network can be applied to future efforts. For instance, experience with the network led to the development of standard steps to translate partner agreements into practical action items, thereby putting in place a mechanism for supporting long-term partnership and capacity building.

Sustainability will be dependent on continued staff time for outcomes refinement. As new data become available, the KBAs will need to be refined. Furthermore, continued collection and analysis of data for reporting on monitoring parameters will be dependent on the ability of the Eco-partners Network to secure funding to support future monitoring activities.

In addition, to ensure sustainability in monitoring, further funding is also needed to include the most recent data and analysis in the forest cover and clearance maps. The Landsat satellite imagery for 1990-2000 is freely available, but to conduct the analyses for 2005/6, the data must be purchased. The cost of this varies depending on the size of the area to map, but for an area as large as the Mountains of SW China hotspot, the cost would be in the tens of thousands of dollars. Such analyses are important to ensure that the most relevant and timely data are available to decision makers and planners and therefore this money should be included for future projects.

Successfully meeting our conservation goals within the region will be dependent on communicating the results of this project to all relevant stakeholders, and on the availability of funding and capacity on the ground. To date, there has been excellent progress towards achieving the successful conservation of our biodiversity targets in SW China.

***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.***

This project was mainly a desk study. Nevertheless during collection of field data to validate satellite forest cover analyses, strict measures were taken to ensure the safety of those involved, as well as to prevent disturbance to the landscape. Field data was not extracted but instead was collected through 'remote' observation using cameras mounted on vehicles that were linked to GPS devices.

## **Additional Comments/Recommendations**

## Information Sharing and CEPF Policy

*CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. One way we do this is by making programmatic project documents available on our Web site, [www.cepf.net](http://www.cepf.net), and by marketing these in our newsletter and other communications.*

*These documents are accessed frequently by other CEPF grantees, potential partners, and the wider conservation community.*

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