

# FAO/GLOBAL ENVIRONMENT FACILITY PROJECT DOCUMENT



PROJECT TITLE: Securing Biodiver	rsity Conservation and Sustainable Use in Huangshan Municipality.
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Recipient Country/ies: China	Resource Partner: Global Environmental Facility (GEF)
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Government / otner Counterpart(s):	Huangshan Administrative Committee (HSAC)
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Financing Plan: GEF/LDCF/SCCF all	location: USD 2 607 273
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HSAC:	USD 5 473 612
Yixian County Bureau of Forestry:	USD 88 200
Huangshan Municipal Bureau of Finar	
Huangshan Tourism Development Con	npany: USD 372 000
Village Producer's Councils:	USD 436 500
FAO:	USD 237 900
Subtotal Co-financing:	USD 10 508 212
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Total Budget:	USD 13 115 485

#### **EXECUTIVE SUMMARY:**

The <u>goal</u> of the Project is to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The Project 's specific <u>objective</u> is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve (HNSR) to strengthen and upgrade the existing municipal system of PAs.

Progress towards meeting this goal would be achieved through supporting the implementation of three mutually reinforcing technical components plus a crosscutting component. The project components address: (i) Policy, Planning and Institutional Arrangements; (ii) Improved Nature Reserve Management Effectiveness and Networks; (iii) Capacity Building, Environmental Education and Public Awareness; and (iv) Information Dissemination and Project Monitoring & Evaluation.

To meet the project objective and in light of the large number of existing nature reserves and significant differences in capacity, the Project has been designed using a Tiered approach (Figure A) beginning with HNSR in Tier 1 and five reserves in Tier 2. These reserves will be strengthened through the introduction of new concepts in planning and management including promoting greater

participation of local communities living in or adjacent to the reserve. Tier 3 is comprised of an additional 6 reserves that will participate in the creation of a reserve network and ecological health monitoring activities. Tier 4 includes 61 county level nature reserves that will participate in project-supported capacity development activities.

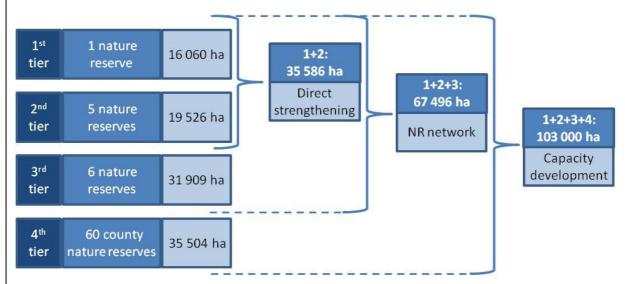


Figure A: Overview of Tiered system of activities

Supported by an enabling policy framework that will build on the project's initial experiences and "lessons-learned" it is expected there will be good potential in the middle to long term for replication and scaling up to other nature reserves in the municipality. The experiences derived from this approach will also be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan (and model) for Huangshan Municipality's System of Protected Areas. A series of publications based on "best practices" achieved during implementation, "peer to peer" site visits and a web page will be used to ensure wide dissemination of project "products" to other PAs in China.

The expected <u>outcomes</u> of the five year project are: (i) creation of an integrated approach to the conservation and management of forest biodiversity supported by a coherent policy, planning and institutional framework in Huangshan Municipality (biodiversity conservation identified and incorporated as a priority in the Huangshan Municipal 13<sup>th</sup> 5 Year Social and Economic Development Plan); (ii) an increase in average management efficiency in 12 project supported nature reserves included in the municipal network of protected areas improving the status of protected areas (average management efficiency score in BD Tracking Tool (TT) increased from 50 to 65 and improvement in key biodiversity species indicators), (iii) an increased institutional capacity and public and political support for the conservation of biodiversity in China's forest ecosystems (biodiversity modules Mainstreamed in 10 primary and 10 secondary school curricula, biodiversity considerations incorporated in 6 economic sector development plans, and visits in 5 project supported NRs increased to 80,000); and (iv) evidence that "lessons learned" from the project are being taken up and replicated elsewhere in the non-participating NRs (5 non-project supported NRs adopt one or more of the new approaches generated by the project).

Global environmental benefits (GEB) to be achieved through the Project (see Appendix 1) include: (i) direct strengthening of management effectiveness of 12 national and provincial reserves to better conserve biodiversity of global significance that in aggregate represent 67,496 ha (including 35,586 ha for Tier 1 and 2 reserves and an additional 6 national and provincial reserves in Tier 3 covering 31,909 ha) through participation in the creation of NR network encompassing Tiers 1-3; (ii) Indirect strengthening and support of 35,504 ha of 60 county reserves (Tier 4) through participation in training and capacity development (all 4 Tiers); (iii) Biological diversity conservation objectives and practices mainstreamed into a total of 50,414 hectares of productive forest and agriculture land through the: (a)

establishment of a biologically friendly landscape measuring an estimated 3,800 ha in size connecting Mt Wuxishan (Wuxishan PNR) and Jiulongfeng Peak (Jiulongfeng NNR) with the HNSR; and (b) improving the sustainability of an estimated 46,614 ha of agricultural lands through project-supported efforts to "main-stream" biodiversity considerations in policies and regulation in this priority sector. (iv) Globally significant biological diversity will also be conserved and maintained through the project's efforts. Among the ecosystems and species that will benefit are the following:

(a) Unique bamboo forest in Qingliangfeng NR maintains its 40 species composition. (b) The number of giant spiny frog *Paa spinosa* (IUCN VU) in target PA streams is maintained or increases.

The success of these efforts will be measured through a set of specific indicators including the monitoring of several selected indicator species. Increasing or maintaining the population sizes of these species, despite intensifying pressures on biodiversity in the project area, will be an important measure of success. Over the longer-term, results derived from the integrated monitoring of the ecological health of Huangshan's main ecosystems including threats associated with alien species and climate change are expected to lead to more informed decision-making leading to improved functioning of forest ecosystems and processes.

The main project partners and respective co-financing amounts of the USD 13.12 million project are: (i) GEF (USD 2.61 M), (ii) Huangshan Administrative Committee (USD 5.47 million); (iii) Yixian County Bureau of Forestry (USD 0.09 million); (iv) Huangshan Municipal Bureau of Finance (USD 3.9 million); (v) Huangshan Tourism Development Company (USD 0.37 million); (vi) local Village Producer's Councils (USD 0.44 million); and (vii) FAO (USD 0.24 million).

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# **GLOSSARY OF ACRONYMS**

AWP/B	Annual Work Plan & Budget
BAC	Biodiversity Advisory Committee
BCC	Biodiversity Conservation Committee
BD-SO	Biodiversity – Strategic Objective (GEF)
BGF	Bureau of Gardens and Forestry
BH	Budget Holder
CBPFA	China – GEF Biodiversity Partnership and Framework for Action
CC	Climate Change
CCC	Co-management Conservation Committee
CEO	Chief Executing Officer (GEF)
CNAO	China National Audit Office
CPS	Country Partnership Strategy (WB)
CRS	Community Relations Section
CSO	Civil society organization
DG	Director General
DNRP	Division of Natural Resource Protection (GFB)
EA	Executing Agency
EOP	End of Project
EP	Executing Partner
EQ	Environmental Quality
FA	Focal Area
FAD	Finance and Accounting Division (EDB)
FAO	Food and Agriculture Organization of the United Nations
FAO/CN	FAO China
FCC	Forest Consultative Committee
FiA	Fiduciary Assessment
FOM	Forest Assessment Management and Conservation Division (FAO)
FPMIS	Field Project Management Information System (FAO)
FSP	Full – size Project
GEBs	Global Environmental Benefits
GEF	Global Environment Facility
GEFSEC	GEF Secretariat
GFB	Gardening and Forestry Bureau (HSAC)
GIFDC	Guangxi Integrated Forestry Development Project (WB)
GIS	Geographic Information System
HNSR	Huangshan National Scenic Reserve
HSAC	Huangshan Administrative Committee
HTDC	Huangshan Tourism Development Corporation
IA	Implementing Agency
ICR	Implementation Completion Report
IEM	Integrated Ecosystem Management
IFAD	International Fund for Agricultural Development
IUCN	International Union for the Conservation of Nature
LOP	Life of Project
LTO	Lead Technical Officer
LTU	Lead Technical Unit
MBOF	Municipal Bureau of Finance
MBOFo	Municipal Bureau of Forestry
METT	Management Effectiveness Tracking Tool
MOF	Ministry of Finance
MOU	Memorandum of Understanding
M&E	Monitoring and Evaluation
MIS	Management Information System
MTE	Mid-term Evaluation
NBSAP	National Biodiversity Strategy and Action Plan

NCF N	Non-commercial Forest
NGO N	Non Governmental Organization
NNR N	National Nature Reserve
NR N	Nature Reserve
NREG N	Natural Resources and Environment Group (FAO)
NSR N	National Scenic Reserve
OP C	Operational Programme
OR C	Organizational Results
PA P	Protected Areas
PBOF P	Provincial Bureau of Finance
PBOFo P	Provincial Bureau of Forestry
PDO P	Project Development Objective
	Project Identification Form (GEF)
PInR P	Project Implementation Report
	Project Implementation Review
PLG P	Project Leading Group
	Project Manager
	Project Management Office
PNR P	Project Nature Reserve
PPG P	Project Preparation Grant (GEF)
	Project Progress Report
PRC P	People's Republic of China
PRODOC P	Project Document
PSC P	Project Steering Committee
	Project Task Manager
PY P	Project Year
RAP R	Regional Office for Asia and the Pacific (FAO)
	Strategic Environmental Impact Assessment
SFA S	State Forest Agency
SO S	Strategic Objective
SOA S	State Oceans Agency
STAP S	Scientific and Technical Advisory Panel (GEF)
TBD T	Γο Be Determined
TCI I	Investment Centre Division (FAO)
	Asia & Pacific Service (TCI - FAO)
TNC T	The Nature Conservancy
	Terms of Reference
USD U	United States Dollar

#### **SECTION 1 – RELEVANCE**

#### 1.1 GENERAL CONTEXT

- 1. The project area consists of Huangshan Municipality, located in Eastern China's Anhui Province covering some 9,807 km² in area with a total population of 1.5 million. The landscape is dominated by a number of mountain ranges of which the Huangshan, Baijishan and West Tianmushan are the most important in terms of biodiversity of global significance. Major forest types include evergreen broad-leaved forest, evergreen and deciduous broadleaved forest, deciduous broad-leaved forest, mixed coniferous forest and at higher elevations, conifers. Forest cover in the municipality represents approximately 75% of total area.
- Huangshan's broad range of forest habitats support a rich variety of flora and fauna estimated to include over 1,800 species of higher plants and 456 species of vertebrates accounting for 7 % of the total known plant and animal species found in China. Many of these are considered to be rare or endangered in China (national protected category I or II). Named after the Huangshan mountains of Anhui Province where it was first described, the Huangshan pine (Pinus hwangshanensis) is endemic to the mountains of Eastern China. Other examples of rare or endangered flora include: Chinese Ring-cupped Oak (Ouercus myrsinifolia), Golden Larch (Pseudolarix kaempferi), Ginkgo (Gingko biloba), Douglas fir (Pseudotsuga sinensis and Chinese yew (Taxus spp.), Examples of rare or endangered fauna include: Clouded leopard (Neofelis nebulosa), Black muntjac (Muntiacus crinifrons), Spotted deer (Cervus nippon), Chinese serow (Capricornis milneedwardsi), Tibetan macaque (Macaca thibetana), White-necked long-tailed pheasant, (Syrmaticus ellioti), Silver pheasant (Lophura nycthemera), Giant salamander (Andrias divadianus), Henry emmenopterys (Emmenoptyrys henryi), Giant spiny frog (Paa spinosa) and Sunken ear frog (Rana tormotus). The Chiang-nan Hilly Region (of which Huangshan Municipality is a part together with the Zhejiang and Fujian Uplands) is one of 108 biodiversity distribution centers (for plant species) documented by research supported by the International Union for the Conservation of Nature (IUCN) in 1990. In 2009, The Nature Conservancy (TNC) designated Huangshan Municipality as one of 33 areas to be considered as priorities for biodiversity conservation in China. One of the criteria used to base this recommendation was the application of an "irreplaceability" index that demonstrated that the Municipality had the highest value possible in Eastern China and that these mountains and represented the only biodiversity "hot spot" in this region of China.<sup>2</sup>
- 3. There are at present seventy-three (73) protected areas<sup>3</sup> (PA) in Huangshan Municipality covering an aggregate 105,747 hectares (see Table 1 in Section 2 below for summary information). Of the 73 PAs, the project aims to carry out activities directly with twelve (12) PAs, including: three (3) national scenic reserves (NSR); two (2) national nature reserves (NNR) with a national status and a budget financed directly from national coffers; six (6) out

Local scientists and NR staff members have seen traces (scat and hair) of the Clouded leopard in Huangshan in recent years, albeit this data never has been recorded systematically. The most recent recorded of the Clouded leopard was in 2005,

when one leopard was trapped illegally in Huangshan (pers.comm. Professor Pan Xinjian and Professor Cheng Jun).

<sup>2</sup> "Irreplaceability" is measured as a continuum of values between 0 and 1, where sites with values of 1 are essential for achieving more than one biodiversity target and are therefore irreplaceable. As the site has an increasing number of potential replacements, it becomes more replaceable and the values decrease from 1. Hence, sites with rarer biodiversity features have

higher irreplaceability values than sites with more common features. See CBPF and Action for more detail.

The term "protected area" is used here as a general term that encompasses many different kinds of specially managed areas

<sup>&</sup>lt;sup>3</sup> The term "protected area" is used here as a general term that encompasses many different kinds of specially managed area at all levels, including national and provincial nature reserves, scenic areas, and so on.

of the seven (7) provincial nature reserves (PNR) (one PNR is excluded from the inclusion in the project activities due to its proximity to a military facility); and one (1) county nature reserve. The remaining sixty (60) county-level reserves will benefit indirectly from the project. Almost all of these county reserves were designated based upon their cultural or historical significance. Natural values and biodiversity benefits played little role in their designation, and therefore in most cases these are extremely small sites with no active management per se and no significant biodiversity or ecosystem benefits. With the exclusion of one PNR, the project aims to directly and indirectly contribute to the total of 103,000 hectares of PAs.

- 4. The largest and best known of the three National Scenic Reserves is Huangshan (Yellow Mountain). Situated in Huangshan Municipality, Huangshan was designated a national scenic reserve (NSR) due to its geological formations and visual landscapes that have become world renown. Huangshan National Scenic Reserve (HNSR) subsequently was declared a "Key National Scenic Area" (1982) and became one of the country's top 10 tourist attractions (1985) and a World Heritage Site (1990). It receives on average over 2 million visitors a year and its entrance fees are estimated to generate USD 75 million annually. Infrastructure, personnel and management effectiveness are "world class". The area is managed by the Huangshan Administrative Committee (HSAC) in close partnership with the Huangshan Tourism Development Company (HTDC), a publicly traded company in which the government has a 51% ownership interest. The HNSR also represents one of the best-preserved forest ecosystems in eastern China (an estimated 93% of the area remains in forest cover).
- 5. Visitation to HNSR has generated significant economic benefits for the Municipality. A recent survey estimated that in the development of the HNSR as a tourist site, over 200,000 local jobs (direct and indirect) were created mainly in the hospitality industry, the vast majority filled by individuals formerly dependent on the unsustainable extractive use of the Reserve's natural resources. Other "best practices" that evolved with the successful growth of the NSR included sustainable tourism management, public awareness and participative management principles. These experiences can be drawn on and tailored to meet many of the needs of the Municipality's other NRs. Similarly, given the number of visitors to the HNSR, promoting closer collaboration between the Reserve and the municipality's remaining NRs will contribute to increases in: (i) public awareness of the importance of biodiversity conservation, (ii) capacity to manage tourism growth in municipal NRs, (iii) sources of much needed revenue for the NRs, and (iv) visitation serving to reduce pressure on the NSR itself. Perhaps of greater significance, by addressing the issue of growing demand (and associated threats) to the municipal system of NRs, the Project will generate "lessons learned" and experiences that will have widespread relevance to many of China's other nature reserves.
- 6. In light of the growing need to manage tourism impacts in China's NRs, Huangshan's successful experience to date in the management and development of the HNSR, allows HNSR to play an important core or anchor role in creating and strengthening the emerging municipal-level system of protected areas. The project has good potential to build on existing policies and support the creation of an enabling policy framework and hereby make a significant contribution to address critical issue and its impact on the conservation of biodiversity of global importance. This can be done at both the municipal level and, through outreach, at provincial level influencing similar interventions elsewhere in both Anhui and other provinces in China.

#### 1.1.1 Rationale

#### Threats to biodiversity conservation

- 7. The main categories of threats to China's biodiversity are<sup>4</sup>: (i) overgrazing of grasslands, (ii) loss of wetlands, (iii) commercial and illegal logging of forests, (iv) construction and mining/resource exploitation, (v) urban expansion, (vi) monoculture, (vii) invasive alien species, and (viii) climate change. Over the longer term, there is growing concern over the possible effects of climate change (CC) on Huangshan's forest ecosystems including those representative samples found in the existing system of nature reserves. Meteorological monitoring at HNSR indicates a measurable warming over the past 50 years and anecdotal evidence highlights the noticeable earlier arrival of migrating birds and butterflies in the Spring season. Evidence to date appears to indicate that CC may be contributing to more extreme weather events and changes in certain species distributions and increased vulnerability of forest ecosystems to fire, disease and alien species.
- 8. Despite the government and public commitment to and support for environmental protection in Huangshan Municipality, there is growing evidence that biodiversity conservation objectives are not being fully achieved through the existing NR system. Many NRs face significant challenges in working cooperatively with adjacent communities and/or communities located inside the reserves themselves. For example, an estimated 2,400 people live inside Lingnan Provincial NR, which measures only 28 km². Many community members' livelihoods depend largely on the extraction of natural resources (fuel wood, medicinal herbs and/or hunting). Illegal logging and hunting in NRs continues at low levels despite past efforts to control it. Similarly there is evidence that illegal fishing is also prevalent in a number of rivers that pass through some NRs that include the use of such outlawed methods as electric rods contributing to mass kill-off. Annual fires associated with clearing of fields for planting poses an additional major threat to a number of NRs.
- 9. The METT scoring reveals most of these threats to be low level (see Table 1 below). However, they are not insignificant. Altogether they form a constant degrading pressure on NRs and their ability to conserve the biodiversity entrusted to them. In the absence of strengthening NR management capacity and the emerging NR system as a whole, these pressures will continue to degrade habitats and biodiversity.
- 10. In addition to the threats outlined above, Huangshan's PA face another threat to biodiversity and to effective PA management: the potential adverse impacts associated with increasing visitation to the municipality's nature reserves and the absence of policies, plans and capacity to manage this new use of NRs.
- 11. In recent years, tourism has grown exponentially in China, reaching an estimated 55 million foreign visits (in 2010). Domestic tourist trips were estimated at 1.9 billion for the same year. In 2009 among these trips there was an estimated 333 million visits to China's NRs alone. The country's continued development and diversification of the economy, a growing middle class with disposable income, and the growth in foreign visitors altogether provide a basis to project a continued increase in visitation rates to the country's NRs. There

<sup>&</sup>lt;sup>4</sup> China Biodiversity Partnership and Framework for Action (CBPFA) 2007–2017

is, however, increasing evidence that mass tourism, characterizing many of China's NRs, is adversely affecting the ecological integrity of the reserves themselves and the provision of "goods and services" including the conservation of biodiversity.<sup>5</sup> Fortunately, there are examples of State NRs (including HNSR) that are working to meet the challenge of accommodating increasing visitation while still conserving biodiversity. But pressure on these NSRs is increasing faster than their capacity to improve biodiversity conservation effectiveness.

12. However, the main constraint identified is the lack of human capacity in the conservation of biodiversity at all levels comprising the municipal NR system. Even in the HNSR itself, which in many respects meets international standards in terms of planning and management as a scenic reserve, there is little capacity with respect to managing biodiversity. This includes a lack of baseline data and scientifically based monitoring programme. The management effectiveness of other Huangshan NRs suffers from these constraints along with other constraints such as no community outreach programmes and visitor facilities are poor to non-existent. The situation is exacerbated further by lack of coordination and collaboration between and among many of the relevant mainline government agencies of which the most important are the Bureau of Forestry (responsible for natural forest reserves and protected areas) and the Bureau of Construction (responsible for national scenic reserves).

## Baseline investments, project co-financing and incrementality of GEF investment

- 13. This project is designed to utilize incremental GEF investment to "top-up" a significant baseline suite of projects in order to enable this baseline (and future baseline funding) to generate global benefits. Current initiatives for environmental protection under the existing NR system provide a starting point and solid basis for an enhancement of biodiversity conservation. The proposed GEF investment will be targeted towards addressing the weaknesses and gaps of the current system, significantly increasing the municipalities' capability to effectively protect Huangshan's biodiversity against the threats outlined above.
- 14. The most important baseline activities that the GEF investment will improve and leverage include the following:
- 15. Huangshan National Scenic Reserve (HNSR) managed by the Huangshan Scenic Area Administrative Committee (HSAC) [co-financing value US\$ 5,473,612]: The existing management structure of the HSAC provides a vehicle for GEF investments as it provides institutional structures and management mechanisms highly complementary to the proposed GEF project objectives. HSAC follows the principle of "balancing preservation and usage" as reflected in the HNSR management plan including the following main elements: 1) Infrastructure support, maintenance and development including regulation of visitor flows; 2) staff support and training including in environmental protection aspects; and 3) increasing the level of information and awareness on environmental protection. The total budget of HNSR over the project period is the equivalent of approximately US\$ 38 million of which 5.5 million will co-finance activities supported by the project.
- 16. While the HNSR has significant capacity in terms of tourism/visitor management, infrastructure and staffing numbers, the HNSR has almost no capacity for targeted biodiversity conservation. The reserve does not feature a biodiversity conservation strategy or

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<sup>&</sup>lt;sup>5</sup> Recent examples include tourism related impacts on the Ordos Relict Gull in the Ordos Reserve (Inner Mongolia) and the reduction of giant panda habitat Wolong NR (Sichuan).

a list of biodiversity conservation priorities. HNSR has no staff with expertise in biodiversity conservation and no corresponding education and awareness raising program covering the biodiversity harbored in the reserve. While the reserve does informally monitor the condition of its endemic (and signature) Huangshan pine, there is little to no systematic monitoring or information gathering about the Reserve's biodiversity and therefore little basis upon which to develop and implement a biodiversity conservation plan. And finally, the reserve currently operates as an island on its own with no mechanism or system in place for cooperating with other reserves in Huangshan Municipality.

- 17. Utilizing the extensive management system already in place, the GEF incremental funding will fill these biodiversity related gaps and thereby enable the reserve to, for the first time, establish a biodiversity conservation program. This will in turn serve as a model for the surrounding reserves and be a critical part of the network building approach of the project. The Reserve's solid operational capacity will maximize the direct results and long-term impact of the proposed GEF intervention.
- 18. Investments in upgrading of Qingliangfeng Nature Reserve from provincial NR to national level NR [co-financing value US\$ 3,900,000]: Anhui Provincial Bureau of Forestry and the Huangshan Municipal Bureau of Finance have earmarked over 3.9 million USD to improve the infrastructure of the reserve, to procure needed equipment, and to prepare and implement reserve management and operational plans. But the reserve has little to no biodiversity conservation capacity, no biodiversity monitoring program, and no management effectiveness training program in place that includes biodiversity as a priority. There is no sharing of information with other reserves. GEF funds will address these gaps and thereby leverage the existing baseline program into an effective and efficient investment in biodiversity conservation. The incremental funding will enable the reserve to establish and implement a biodiversity conservation program and enable the reserve to play an important role in the emerging protected area network in Huangshan Municipality.
- 19. **Local communities' co-management contribution** [co-financing value US\$ 436,500]: This baseline program aims at establishing co-management mechanisms enabling local communities to make an active contribution to the management of the NRs. The baseline activity is highly complementary to the GEF investment which also includes efforts to engage local communities in biodiversity conservation efforts. GEF resources will ensure that biodiversity is an integral part of the co-management framework by providing incremental expertise and investment and piloting biodiversity sensitive co-management mechanisms including demonstrating low-impact sustainable livelihood options with local communities.
- 20. The five communities identified to participate in co-management pilot efforts and some of their focus activities are Shenchacun (camellia oil cultivation, ecotourism); Fucun (bamboo cultivation); Chencun (bamboo cultivation); Shanlingcun (torreya cultivation); Liangguancun (bamboo cultivation).
- 21. **Huangshan Tourism Development Company (HTDC)** [co-financing value US\$ 327,000]: Ongoing investments into tourism development, that focus on the added benefits from creating a well connected network of different Huangshan protected areas, are highly complementary to the proposed GEF investment. The baseline activity on tourism development has no specific focus on biodiversity. The GEF incremental resources will ensure mainstreaming of biodiversity conservation objectives and priorities into the existing HTDC investment in particular and broader tourism planning and management in the

Huangshan area in general. The resulting mechanisms for biodiversity conservation and ecosystem protection will be valuable assets for sustainable tourism in Huangshan. The proposed GEF investment will enable the HDTC to become a full partner in building an effective network of NRs that benefits tourism while enhancing biodiversity conservation.

- 22. Yixian County Bureau of Forestry [co-financing value US\$ 88,200]: The baseline project implemented by the Yixian County Bureau of Forestry aims at the improvement of the management system of the Wuxishan provincial nature reserve, especially regarding timber production management and prevention of illegal logging. The incremental GEF investment will help Yixian County to fully incorporate biodiversity conservation and sustainable use practices into its emerging management system. In addition, the GEF project will facilitate the exchange with other NRs in the area, especially the HSR. Co-management mechanisms established through the GEF investment (see details above) will play a major role in enhancing local communities' awareness and recognition of the real value of forest resources as a long-term source of income. Recognizing the strong complementarity of objectives between the baseline project and the GEF incremental funding, the Yixian County Bureau of Forestry will contribute co-financing for building a field station to enable the effective implementation of biodiversity conservation activities.
- 23. To summarize, the baseline scenario is characterized by: (i) a relative large, intact forest ecosystem that faces a number of threats; (ii) a system of nature reserves that is defined by a loose assemblage of protected areas, many of them too small to achieve their intended management objectives and all operating in relatively isolation from each other; (iii) weak institutional capacity in most of the municipal NRs; (iv) a traditional planning and management approach best described as top-down with little public participation; (v) lack of a science-based baseline and monitoring information system needed to inform decision-making; (vi) policy and planning gaps particularly at the municipal level impeding consideration and adoption of more effective management options; (vii) lack of interinstitutional coordination among agencies responsible for protected areas and more generally conservation of biodiversity; and (vii) a growing demand for opening selected reserves to tourism visitation as part of municipal-wide effort to provide an expanded and diversified experience to tourists.
- 24. GEF resources will build on the existing management system and leverage current investments in order to significantly improve biodiversity conservation in comparison to the baseline scenario. The alternative scenario brought about by the incremental GEF investment will feature enhanced and expanded provision of technical assistance for:
- the modernization of the existing approach to the planning and management of nature reserves (e.g., through support for a "bottom-up" participatory planning with local communities), and
- the main-streaming of biodiversity considerations in policy frameworks and line agency sector plans combined with means for their implementation (e.g., strategic environmental impact assessment).

The proposed GEF project will achieve this through a Tiered approach beginning with six priority reserves (1<sup>st</sup> Tier plus 2<sup>nd</sup> Tier – see *Figure A: Overview of Tiered system of activities* in the Executive Summery) to be strengthened through the introduction of new concepts in planning and management including promoting greater participation of local communities living in or adjacent to these reserves. A 3<sup>rd</sup> Tier consists of an additional 6 reserves that will participate in the creation of a reserve network and ecological health monitoring activities. All

municipal reserves (Tiers 1-4) will participate in project-supported capacity building activities. Efficiencies are expected to be achieved primarily through improving management effectiveness among individual NRs that in turn will contribute to more efficient targeting and utilization of national budgetary resources. Moreover, the successful piloting and recognition of many innovative activities in NR management will be a basis for scaling up to other NRs both in Huangshan and elsewhere in China resulting in similar savings and reduced costs.

#### 1.1.2 FAO's comparative advantages

- 25. FAO is the global lead technical UN Agency for agriculture, forestry and fisheries with six decades of accumulated knowledge and global, national, and local experience. It is the main UN Agency for collecting and disseminating relevant information utilized worldwide in these sectors, and the only UN agency with a Forestry Department (FD). The FAO FD employs about 150 staff including about 10 working in the Asia Pacific region.
- 26. Within FAO, the FD takes the lead in supporting member countries to implement sustainable forest management by providing policy advice, technical knowledge and reliable information, while ensuring that forests and trees contribute to sustainable livelihoods. The FAO FD works to balance social and environmental considerations with the economic needs of rural populations living in and near forest areas. At both global and national levels, FAO serves as a neutral forum for policy dialogue, as a reliable source of information on forests and trees and as a provider of expert technical assistance and advice to help countries develop and implement effective national forest programmes. FAO has a rich and unique experience worldwide designing and implementing projects with country partners to build institutional capacities for forestry, wildlife and natural resources management and in integrating forestry with biodiversity conservation and forest management.
- 27. FAO has cooperated with the People's Republic of China (PRC) for more than 30 years in the project relevant sectors of agriculture, forestry and natural resources management. The focus of collaboration has been expanded from the initial technical support (i.e. research) and capacity building gradually to policy support and partnership building. FAO has a long record of cooperation with the State Forest Administration and Provincial forest administration in many different areas, including: sustainable forest management, reforestation, combating desertification, plantation development, agroforestry and farm forestry, forest tenure reform, forest policy, pest and disease control, watershed management, support for decentralization of forest management policies and expertise, and monitoring and assessing forestry programmes, including remote sensing. The experience FAO has gained in working with Chinese partners is an important element in FAO's comparative advantage to implement this GEF project, as the project will build on this foundation of lessons learnt and good practice.
- 28. In addition, FAO's Investment Centre has supported a number of preparation and supervision missions of agriculture investment projects that could provide future opportunities for scaling up. FAO is currently involved together with the World Bank in assisting the provincial government of Anhui in prepration of a loan project that has a tourism component (Anhui Yellow Mountain New Countryside Project). Finally, given the Organization's administrative, technical and financial support for similar project concepts in the past, there is a unique opportunity to replicate the proposed approach to other FAO supported iniatives both in China and elsewhere.

## 1.1.3 Participants and other stakeholders

- 29. The preparatory phase of the project placed strong emphasis on stakeholder participation. Consultations and group discussions were held with most stakeholders, including national and regional government agencies, civil society organizations, donors and local stakeholders in each of the pilot areas. The PPG phase included the briefing of key government officials regarding project design and urgency. Several workshops generated indepth discussions and agreement regarding project strategy, activities and priorities. The final project document was designed with stakeholders' full involvement and thorough vetting by representatives of key organizations.
- 30. The main beneficiaries of the component will be: (i) the NR staff in the 12 Reserves receiving direct support under the Project, (ii) local and municipal government stakeholders, (iii) communities living in proximity to the project-supported NRs including an estimated 7,664 individuals representing 2,467 households living in 5 administrative villages on the fringes of the NRs expected to benefit directly from the Project; and (iv) the broader Municipality and visitors benefiting from conservation education and public awareness activities supported by the Project.
- 31. Women comprise approximately 49% of the local population and will be beneficiaries of the project's co-management and sustainable livelihoods support work. The primary sources of income for women are agriculture/farming (Figure 1), ranking as the primary or secondary source of income by women in all five target villages. For local men living in the project target communities, agriculture and forestry are also important sources of income supplemented by migrant labor as an important income source. With migrant labor playing such an important role for men, the number of women actually living and working in the project areas on a day-to-day basis is likely greater than 50% of the overall population -closer to 60-70% of the daily local population (2012 survey data from Huangshan Municipality). Both men and women list 3-4 different sources of income in the local villages, implying a flexibility and entrepreneurship that bodes well for their participation in comanagement approaches and to enable them to benefit from the improved goods and services generated by nearby protected areas.

Figure 1: Socioeconomic Data of the Project Target Villages (2012)									
T7011	D it is NO	Average per	Sources of Income						
Village	Proximity to NR	capita income (Yuan)	Men	Women					
			private business	private business					
Shenchacun	HNSR	32,086	others <sup>i</sup>	agriculture					
			forestry	others					
			private business	private business					
Fucun	HNSR	9,450	forestry	agriculture					
			agriculture	others					
			agriculture	agriculture					
Chencun	HNSR	8,645	migrant labor <sup>ii</sup>	forestry					
			forestry	others					

			agriculture	agriculture	
Shanlingcun	Jiulongfeng NR	8,050	migrant labor	forestry	
			forestry	migrant labor	
		7,084	agriculture	agriculture	
Liangguancun	Wuxishan NR		forestry	forestry	
			migrant labor	others	

<sup>(</sup>i) "Others" category includes: (a) government subsidies for agricultural activities; and (b) public welfare allowance for people over age 60.

### 1.1.4 Lessons learned from past and related work, including evaluations

32. The recently completed Implementation Completion Report (ICR) of the GEF supported "Improving Management of Nature Reserves Component" of the Guangxi Integrated Forestry Development and Conservation Project (GIFDC) identified a number of highly relevant experiences and lessons learned that were taken into account in project design. The component was highly innovative that included promoting: (i) a bottom-up approach to NR planning and management, (ii) increased public participation in the NR planning and management process through co-management principles and the creation of Community Conservation Committees (CCCs), (iii) the development and incorporation of a more scientific basis into both monitoring and decision-making in NR management, and (iv) building networks with other institutions to broaden understanding and glean political and financial support for the NR through the Forestry Coordination Committees (FCCs).

# 1.1.5 Links to national development goals, strategies, plans, policy and legislation, GEF and FAO's Strategic Objectives

- 33. National Priorities: The Project is in direct conformity with the China Biodiversity Partnership and Framework for Action (CBPFA) 2011- 2017, China's principal investment strategy for biodiversity conservation developed to facilitate dialogue with GEF and other financing agencies. Under this Framework, the Project will directly support three of the five priority themes identified under the Framework. These are: (i) Improving Biodiversity Governance (Theme 1); (ii) Mainstreaming Biodiversity into Socio-Economic Sectors and Plans and Investment Decision-Making (Theme 2); and (iii) Investing Effectively in Reducing Biodiversity loss in Protected Areas (Theme 3). More specifically, it will support the following results identified in the CBPFA: (i) financial flows to biodiversity conservation increase over current baseline (Result 4); (ii) the general public is supportive of conserving biodiversity (Result 5); and (iii) biodiversity conservation and sustainable use is mainstreamed into local plans (Result 12).
- 34. The project also supports key strategic actions defined under the China National Biodiversity Strategy and Action Plan (NBSAP) revised for the period 2011-2030. The NBSAP comprises eight strategic tasks, 30 actions under ten priority domains, and 39 biodiversity conservation priority projects.
- The project is consistent with all eight Strategic Tasks, in particular, #1: Further improve related policies, regulations and systems on biodiversity conservation; #2: promote mainstreaming of biodiversity conservation into related planning processes; #3: strengthen

<sup>(</sup>ii) "Migrant labor income" refers to the local farmers / villagers who work in the cities as either skilled construction workers or for short-term contract in factories when they are not busy with their own farming work.

- capacities for biodiversity conservation; #8: raise public awareness and strengthen international cooperation and exchange.
- The project supports a key NBSAP Priority Areas of Inland and Terrestrial and Aquatic Conservation area 7: the Hilly Plain Region of East and Central China, where Huangshan mountain area of Anhui province is designated as one of the priority geographic areas of biodiversity conservation.
- The project supports the following Priority Actions: Action 4: incorporate biodiversity conservation into relevant sectoral and regional planning and programmes; Action 7: carry out baseline surveys on biological resources and ecosystems; Action 9: undertake biodiversity monitoring and pre-warning; Action 11: undertake comprehensive biodiversity evaluation; Action 12: integrate the implementation and improvement of national nature reserve planning; Action 14: standardize nature reserve development and improve the effectiveness of management of nature reserves; and Action 29: establish mechanisms of public participation.
- 35. China's macro-economic policy as reflected in 12<sup>th</sup> National Five Year Plan covering the period 2011 2015 identifies "strengthening the supervision of protected areas construction to improve the management conservation capacity" as a priority (Chapter 25, Section 2). In this same section the Plan also calls for an "increase in efforts to protect biological species resources and improve the management levels." These priorities are supported through the aforementioned CBPFA. The 12<sup>th</sup> Five Year Plan for the State Ministry of Environmental Protection calls for the "upgrading of protected area construction and management levels" and "increase the protected area of land in Eastern China up to 15 % of the total land by 2015 (Part 4, Section 4).
- 36. At the provincial and municipal level, the Master Plan for Building Anhui Province into an Ecological Province has identified water retention in southern Anhui Province as a critical development objective in Huangshan Municipality to be achieved through conserving and increasing the forest coverage and biodiversity conservation. These objectives were subsequently reflected in the Provincial and Municipal 11<sup>th</sup> Five Year Plans. The promotion of eco-tourism and other environmental-friendly industries were identified as priorities in the 12<sup>th</sup> Five-Year Plan. These development objectives are in complete conformity with the project objectives.
- 37. At the provincial and municipal levels Government has placed a high priority on the effective development and management of a system of NRs. This commitment has been demonstrated through the adoption of a series of measures to conserve the area's living resources. These include: (i) promotion of public ecological campaigns, one of the first such efforts in China; (ii) the designation of Huangshan Municipality by the Province's Master Development Plans as an area to be managed primarily for water and biodiversity conservation objectives; objectives that were subsequently reflected in the 11<sup>th</sup> Five Year Plan; and (iii) the establishment of 5 national and 7 provincial level protected areas (PAs) representing in aggregate an area of 564 km² and the establishment of an additional 61 county level NRs representing a further 377 km² of area under protection. More recently, the 12<sup>th</sup> Five Year Plan supported these objectives calling for the strengthening of ecological conservation (Chapter 12, Section 1).
- 38. <u>GEF Priorities</u>: The Project supports GEF-5 Biodiversity Objective # 1 (BD-1): "Improve Sustainability of Protected Area Systems" and BD-2: "Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes, Seascapes and Sectors." The

Project would contribute directly to BD Outcome 1.1: "Improved management effectiveness of existing and new protected areas" through: (i) establishment of an integrated approach to the management and conservation of forest biodiversity in Huangshan Municipality's NR network; (ii) formulation of a strategic master plan for the sustainable management of the municipality's forest ecosystems; and (iii) strengthening management capacities of relevant NR units at all levels (national, provincial and county) and cooperation between the NR units. The contribution to BD-2 would be primarily through: (i) development of policy tools for mainstreaming biodiversity in economic sectors; and (ii) promoting biodiversity-friendly industries (eco-farming, eco-processing, and eco-tourism) in landscapes in proximity to project supported NRs.

- 39. Under the Aichi Strategic Plan for Biodiversity 2011-2020 the Project supports the following Targets: 1 (people awareness of values of biodiversity), 2 (biodiversity values integrated into development planning strategies), 5 (rate if loss of habitat and fragmentation reduced, 7 (areas under agriculture managed sustainably ensuring biodiversity conservation) and (11) terrestrial habitat for biodiversity and ecosystem services is conserved).
- 40. <u>FAO Strategic Objectives</u>: FAO's Strategic Framework as reflected in the Organization's 2014 2017 Medium-term Plan is shaped by a vision of a world free from hunger and malnutrition where food and agriculture contributes to improving the living standards of all, especially the poorest, in an economically, socially and environmentally sustainable manner. The Framework is comprised of five Strategic Objectives (SO) that represent the main areas of work of FAO. Strategic Objective 2 (SO-2), "Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner" is the most directly relevant to the Project. SO-2's emphasis on "improving and increasing" in a "sustainable manner" reflects the broad, multi-sectoral nature of the ecological approach adopted in project design.
- 41. More specifically, the project supports two Organizational Outcomes (OO) under SO-2:
- OO1: Producers and natural resource managers adopt practices that increase and improve the provision of goods and services in agriculture, forestry and fisheries in a sustainable manner;
- OO2: Stakeholders in member countries strengthen governance the laws, policies and institutions that are needed to support producers in the transition to sustainable agricultural systems;
- 42. The project's strong capacity building elements contribute to OO1 by helping stakeholders adopt new practices. The project's strong focus on improving policies and strengthening institutions strongly contributes to OO2 and the critical need for strong policies and institutions to support the adoption of new and improved practices.
- 43. Of particular relevance to the Project is SO 2's emphasis on a holistic approach across sectors including the promotion of more sustainable practices, more viable governance arrangements and evidence based decision making and its emphasis on the integration of work relating to three pillars of sustainability (environmental, economic and social). Given this link with SO2, the project's FAO Development Objective, as reflected in the results framework in Appendix 1 is: "to increase and improve the provision of goods and services from high-value mountain forest ecosystems in a sustainable manner."

#### SECTION 2 – PROJECT FRAMEWORK AND EXPECTED RESULTS

#### 2.1 PROJECT STRATEGY

- 44. The 73 protected areas (PA) in Huangshan Municipality encompass 105,747 hectares and consist of 3 national scenic reserves (NSR), 2 national nature reserves (NNR), 7 provincial nature reserves (PNR) and 61 county nature reserves. The majority of the sixty-one county-level reserves were created for political purposes and in many cases are "paper parks."
- 45. With 73 protected areas in the municipality it was not possible to support a single comprehensive approach whereby all reserves were treated equally. As a result, the Project has been designed with Project activities targeting reserves through a Tiered approach beginning with six priority reserves. These reserves will be strengthened through the introduction of new concepts in planning and management including promoting greater participation of local communities living in or adjacent to these reserves. Supported by an enabling policy framework that will build on the project's initial experiences and "lessons-learned" it is expected there will be a high demand for replication and scaling up to other nature reserves in the municipality post-project. Moreover, the 5 year operational plans supported under sub-component 2.1 will be completed by the end of the Project and new, draft 5 year operational plans will be supported before project closure to ensure the continued application of the new concepts and approaches supported under the 1<sup>st</sup> phase project. Finally, getting the policies "right" in support of the "mainstreaming" of biodiversity in other mainline agencies and sectors will ensure that demand will continue to strengthen the network of protected areas in Huangshan.
- 46. More specifically, project activities will be allocated to different "clusters" of reserves through their participation in one of four Tiers (see Table 1 below for additional details and Appendix 7 for map):
- 47. The **1**<sup>st</sup> **Tier** is represented by 1 nature reserve, Huangshan NSR, which in terms of infrastructure, equipment, capacity and visitation is far in front of the municipality's other PAs. The HNSR was initially created for landscape and cultural management objectives and biodiversity conservation was only of secondary consideration. Nevertheless, as NSR's biodiversity is well-protected, albeit due to the effective maintenance and enforcement for other management objectives, the main approach taken by the Project is to target the large number of visitors and the inclusion of interventions to support increased public awareness of both the biological resources in the Reserve itself as well as those found elsewhere in Huangshan and the role of municipal nature reserves in their conservation.
- 48. In the **2<sup>nd</sup> Tier** there are 5 nature reserves selected from an initial shortlist of 12. Criteria used for their selection consisted of size, biodiversity endowment, ecosystem integrity and existing and future tourism potential. These are: (i) Qingliangfeng NNR, (ii) Jiulongfeng PNR, (iii) Wuxishan PNR, (iv) Tianhushan County NR and (v) Lingnan PNR. Together they represent a mixture of national-level, national-level candidate and provincial reserves with the latter four identified as likely future candidates for eventual upgrading to national reserves status. Project support in this Tier is based primarily on strengthening the

existing nature reserves through provision of training and technical assistance to complement infrastructure and equipment provided through co-financing, installing a participatory, bottom-up planning and management culture, and using the preparation of management and operational plans as vehicles to transform the existing institutional culture.

- 49. A **3<sup>rd</sup> Tier** of reserves is represented by the remaining six nature reserves. These are: Shilishan PNR, Gunjiujiang NNR, Zhawan PNR, Tianhu PNR, Huashan NSR and Qiyunshan NSR. These were grouped together largely due to their lack of immediate capacity to support tourist visitation either due to location and/or lack of infrastructure. However, at the same time they have the potential for future increase in visitation if strengthened and modernized due to their biodiversity endowment. These reserves will participate in the NR Network subcomponent (2.3) and Studies and Monitoring Ecosystem Health sub-component (2.6). Tiers 1-3 therefore encompass 12 nature reserves.
- 50. The **4<sup>th</sup> Tier** is represented by the 61 county nature reserves. As previously noted the vast majority of these reserves are too small and/or created on non-scientific criteria to be effective in conserving biodiversity. It was initially intended that a major activity in the Project would support the rationalization of these reserves into fewer, larger reserves created on a more scientifically sound basis. During project preparation it became readily apparent that this would encounter a number of political problems that could lead to undermining the larger project. Rather a more strategic and longer term process will be called for; one based on increasing awareness among the decision-makers and the public at large for the need for rationalization and the development of an enabling policy, planning and institutional environment which would facilitate this process over the medium to long term. This has been included in Component 1. Nevertheless, together with the previously cited nature reserves, staff responsible for the 61 country NRs will be included in all training activities supported under the Component 2.
- 51. Finally, under Component 4 the Project will support peer—to-peer consultations of staff representing NRs from both the same and different Tiers to reinforce the basic message and innovations promoted under the Project and to define the sequence to be followed towards their implementation.

**Table 1. Project-supported Nature Reserves** 

	Nature Reserve	IUCN Category	Size (ha)	Threat score	METT score	Significant Biodiversity	Permanent Staff #	Management Plan	Management and Tourism Facilities	2012 Annual Budget/Revenue (USD ,000)	2012 Annual Expenditure (USD ,000)
	Tier 1: Nature Reserve										
1	Huangshan NSR	2	16,060	58	77	World natural and cultural heritage site, natural forest, excellent forest ecosystem.	547	20-year Management Plan, but no biodiversity priorities included.	Management Office and well-equipped tourism facilities	8,064.0	10,988.0
						Tier 2: Nati	ure Reserves				
2	Qingliangfeng NNR (in Anhui)	1	7,811	53	55	Great natural forest, good forest ecosystem. [Subtropical evergreen broadleaf forest, rare and endangered plants and animals]	20	Outdated management plan to be updated, with biodiversity priorities specified.	One rented management office, no tourism facilities	212.9	227.4
3	Jiulongfeng PNR	1	2,720	63	45	Good natural forest, excellent forest ecosystem. Features 80% of natural broadleaves forest (ecological NCF).	2	but no biodiversity	In 2011, MOF approved the national level ecological observatory. No tourism facilities	104.8	111.3
4	Wuxishan PNR	1	4,050	69	38	Good natural forest and excellent forest ecosystems.	3	Simple management plan, no biodiversity priorities.	No management station, no tourism facilities	124.6	140.6
5	Tianhushan County NR	1	2,174	61	31	Good natural forest and forest ecosystem, high mountain wetlands.	7	No plan	One management station, no tourism facilities	51.6	59.7
6	Lingnan PNR	1	2,771	65	37	Most significant subtropical vegetation area in the southern Anhui province. Good natural forest and excellent forest ecosystem.	8	Simple management plan no biodiversity priorities	Poor management station, no tourism facilities	106.5	122.6
							ure Reserves				
7	Shilishan PNR	1	1,937	58	55	Good natural forest and excellent forest ecosystem.	5	No plan	Poor management station, no tourism facilities	40.3	48.4
8	Gunjiujiang NNR	1	6,713	54	69	Described as best remaining forest ecosystem at this latitude in the world as well as China.	22	Outdated management plan no biodiversity	Management stations, offices, 1 guesthouse for	167.7	235.4

								priorities; to be updated	visitors		
9	Zhawan PNR	1	1,600	64	36	Good natural forest and excellent forest ecosystem.	1	No	Poor management station, no tourism facilities	25.8	32.3
10	Tianhu PNR	1	4,499	61	38	Well preserved forest vegetation and ecological system; little human impacts.	3	No	One management station	45.2	53.2
11	Huashan NSR	2	6,120	53	60	National scenic reserve featuring underground man-made grottoes dating back to 1,700 hundred years ago with surface land covered by planted trees and forests.	78	Yes; no biodiversity priorities	Well-developed management offices, stations and tourism facilities	806.4	967.7
12	Qiyunshan NSR	2	11,040	58	57	National Geological Park; national level scenic research and forest park, redsand stone landscapes.	15	Yes; no biodiversity priorities	Well-developed management offices, stations and tourism facilities	483.8	806.5
	Tier 4: Nature Reserves (county level)										
						60 county nature reserves: too small and/or created on non-scientific criteria to be effective in conserving BD					

Key: NSR (national scenic reserve); NNR (national nature reserve); PNR (provincial nature reserve).

#### 2.2 PROJECT OBJECTIVES

- 52. The <u>goal</u> of the Project is to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The Project 's specific <u>objective</u> is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of PAs.
- 53. This will be achieved through adopting a Tiered, sequential approach applied to different classes of nature reserves grouped to best benefit from project supported activities in a cost-effective manner. Experiences and "lessons-learned" from other NRs in China relevant to the local circumstances in Huangshan will also be evaluated and where relevant adopted. The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan (and model) for Huangshan Municipality's System of Protected Areas relevant to other areas in China and abroad. A series of "best-practice" publications, peer-to-peer consultations and a web page would be used to ensure wide dissemination of project-generated "products" to other PAs in China.

#### 2.3 EXPECTED PROJECT OUTCOMES

54. The expected outcomes of the five year project are: (i) creation of an integrated approach to the conservation and management of forest biodiversity supported by a coherent policy, planning and institutional framework in Huangshan Municipality (biodiversity conservation identified and incorporated as a priority in the Huangshan Municipal 13th Five Year Social and Economic Development Plan); (ii) an increase in average management efficiency in 12 project supported nature reserves (67,496 ha) included in the municipal network of protected areas improving the status of protected areas (average management efficiency score in BD Tracking Tool (TT) increased from 50 to at least 65 and improvement in key biodiversity species indicators), (iii) an increased institutional capacity and public and political support for the conservation of biodiversity in China's forest ecosystems (biodiversity modules mainstreamed in 10 primary and 10 secondary school curricula, biodiversity considerations incorporated in 6 economic sector development plans, and visits in Tier 2 and/or Tier 3 project supported NRs increased to 80,000/year); and (iv) evidence that "lessons learned" from the project are being taken up and replicated elsewhere in the non-participating NRs (Tier 3 and Tier 4 NRs adopt one or more of the new approaches generated by the project).

## 2.4 PROJECT COMPONENTS AND OUTPUTS

#### **Project overview**

To achieve the project objectives and expected outcomes the Project has been structured in 4 components and various sub-components as presented in Table 2 and described in more detail below.

Table 2: Components and sub-components of the Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

**Component 1: Policy, Planning & Institutional Arrangements** 

- 1.1Policy Formulation
- 1.2Policy Implementation Planning
- 1.3Institutional Arrangements

### **Component 2: Improved NR Management Effectiveness & Networks**

- 2.1 Improved Nature Reserve Management Effectiveness
- 2.2 Co-management and Sustainable Development
- 2.3 Nature Reserve Network
- 2.4 Creating Landscapes for Biodiversity Conservation
- 2.5 Applied Competitive Research in NRs
- 2.6 Studies and Monitoring of Ecosystem Health

#### Component 3: Capacity Building, Environmental Education and Public Awareness

- 3.1 Capacity Building
- 3.2 Environmental Education
- 3.3 Public Awareness

#### Component 4: Information Dissemination and Project M&E

- 4.1 Information Dissemination
- 4.2 M & E

## **Component 1: Policy, Planning and Institutional Arrangements**

55. The objective of Component 1 is to strengthen the existing institutional and policy framework to provide a more enabling environment to support the long-term, sustainable management of biodiversity conservation in Huangshan Municipality. This objective is based on a three-fold effort namely to update and strengthen existing policies, develop medium to long term plans to serve as "road-maps" to guide the implementation of these policies and finally the creation of new institutions responsible for the implementation and provision of technical guidance of these plans and their underlying policies. This will be achieved through the following sub-components:

#### **Sub-component 1.1: Policy Formulation**

56. There exist a number of policies at the national and to lesser extent provincial level (Anhui Province) that address different aspects of biodiversity conservation. However, in Huangshan these broader policies have yet to be complemented with more detailed local policies (implementing regulations). The gaps in the policy framework that have been identified during project preparation represent significant constraints to enact changes with "on-the-ground" impact. Under this sub-component three municipal policies addressing these specific gaps will be formulated in draft and submitted to the Municipal Government for adoption. The three policies will address: (i) biodiversity conservation, (ii) the creation of a municipal-wide system of nature reserves, and (iii) the threat of alien species. The main project support for this sub-component will be technical experts, studies and consultative workshops.

<u>Output 1.1.1.</u> Policies adopted for: (i) the conservation of biodiversity, (ii) establishment of a municipal NR system, and (iii) management of alien species in Huangshan municipality.

A second policy activity supported under this sub-component will address a specific set of challenges the county nature reserves in Huangshan municipality are facing, hampering the effectiveness of biodiversity conservation by these protected areas. In particular, the challenges likely to be addressed include enabling access to new funding sources to increase financial sustainability of these NRs, and to address wildlife-community conflicts. The intensity and characteristics of these challenges vary with local circumstances and specific responses will be further improved and refined during project implementation. By the project's mid-term evaluation sufficient field experience will have been acquired to present concrete options and recommendations for revised and new policies and reach agreement on their formulation among relevant stakeholders. At that time project resources will be made available to assist the policy formulation process primarily through provision of support for technical experts, additional studies and consultative workshops.

<u>Output 1.1.2.</u> Two revised/new policies bolster efforts to strengthen management effectiveness of county-level nature reserves.

### **Sub-component 1.2: Policy Implementation Planning**

- 57. Once policies have been formulated and agreed on by municipal government, there is a need for detailed guidance through a "road map" outlining the steps and processes required to achieve their successful implementation. This will be achieved through the development and adoption of three planning documents: (i) a Biodiversity Conservation Plan, (ii) a Nature Reserve System Plan and (iii) an Ecotourism Forestry Master Plan.
- 58. The Biodiversity Conservation Plan will focus on strengthening the existing institutions responsible for the sector (e.g., HSAC Bureau of Gardens and Forestry) as well as "mainstreaming" biodiversity considerations in other mainline agencies such as the Bureaus of Agriculture and Fisheries, Tourism, Transport and Water. Key elements in this plan are likely to be activities in support of increasing awareness, technical training, development of new policy instruments (e.g., the use of strategic environmental impact assessments) and site visits.
- 59. With respect to the NR System Plan, it became apparent during project preparation that consolidation of county-level NRs that are not viable entities to achieve conservation objectives will not be possible largely for political reasons at least in the timeframe of the Project. Nevertheless, given that much of Huangshan's economic future will be based on the development of a service-based economy dependent on its biodiversity endowment, municipal government needs to establish a technically sound and financially viable system of nature reserves. Some existing reserves will need to be strengthened and upgraded to provincial or national status and in a few cases perhaps new ones created. However it is more likely that a number of the existing 61 county level reserves that are under-resourced and too small to achieve their designated conservation objectives will need to be consolidated or alternatively change their management objectives (e.g., from strict management reserve to recreational areas). The development of a NR System Plan based on the underlying policy will provide the basis and long-term strategy leading to changes required to establish a viable network of nature reserves in the Municipality.
- 60. The third plan will contribute to an already on-going effort led by Anhui University to formulate an Ecotourism Forestry Master Plan on behalf of the Huangshan's Municipal Tourism Commission. This Plan will provide the basis for taking decisions on how best to

use municipal forest resources to support the development of tourism over the medium to long-term. This provides a major opportunity for the Project to integrate biodiversity conservation considerations and the presence and role of nature reserves into a key economic sector that is likely to grow and diversify in the coming years.

No medium to long term plan was felt needed to implement the alien species policy. Rather measures to implement the policy would be formulated through the invitation of technical experts to participate in a series of meetings and the development of specific recommendations to be submitted to government at both the general and sector-specific level.

61. Project resources will be used to support the development of these plans primarily through provision of support for technical experts, studies and consultative workshops.

<u>Output 1.1.3.</u> Three long-term plans to guide the implementation of the two project supported policies (i and ii of Output 1.1.1) and a municipal forest ecotourism master plan developed and under initial implementation.

## **Sub-component 1.3: Institutional Arrangements**

- 62. This sub-component will address the creation of two permanent, multi-institutional committees to facilitate the adoption of the aforementioned policies. The first committee will be the Biodiversity Conservation Committee (BCC) responsible for policy harmonization and ensuring that policies adopted by the municipal government will be "mainstreamed" into their respective sector agencies. The BCC will also ensure that the Nature Reserve System Plan will be budgeted and implemented.
- 63. The Biodiversity Advisory Committee (BAC) will be composed of technical experts representing a wide range of biodiversity expertise created to advise the BCC. In addition, the BCC will serve as the Project's Technical Advisory Committee (see below) and be consulted on the vetting of NR-specific research grants designed to support better informed decision making among NR managers (see sub-component 2).
- 64. The project will support the establishment and effectiveness of these two committees. First, project resources will be used to provide expert advice and analysis on the structural and institutional set-up and operational procedures for the two committees. After establishment, the project will enhance the effectiveness of the committees' work by raising the level of biodiversity related awareness and knowledge of the committee members. Mechanisms employed to ensure that committee members are well-informed will include among others expert led trainings (mainly for BCC members), peer-to-peer knowledge exchange workshops including input from representatives of other municipalities/provinces (for members of both committees), and site visits and interaction with local implementers to increase committee members' understanding of the on-the-ground realities of biodiversity conservation that need to be taken into account for policy adoption planning.

## Output 1.1.4. A permanent Biodiversity Conservation Committee (BCC) to facilitate the

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<sup>&</sup>lt;sup>6</sup> It is thought that the BCC will evolve out of the existing Project Leading Group (PLG) created during the project preparation phase. It consists of Secretary General of the Huangshan Municipal Government, DG of Huangshan Municipal Development and Reform Committee, DG of Huangshan Municipal Forestry Bureau, DDG of HM Finance Bureau, DG of Development and Reform Bureau and DG of GFB. See Section 4.2 for more detail.

implementation of the Nature Reserve System Plan and formulation and implementation of biodiversity-related policies functioning with regular meetings.

<u>Output 1.1.5.</u> A permanent Biodiversity Advisory Committee (BAC) functioning and providing technical support to the BCC.

## **Component 2: Improved NR Management Effectiveness and Networks**

65. The purpose of Component 2 is to strengthen selected nature reserves and establish the basis for the creation of a municipal network of NRs supported by data management and ecological monitoring tools. This will be achieved through the following sub-components:

### **Sub-component 2.1: Improved Nature Reserve Management Effectiveness**

- 66. In recognition of the increasing importance biodiversity conservation will play in the future economic development of the municipality HSAC will increasingly promote visitation to national, provincial and to a lesser extent county nature reserves. In anticipation of increased visitation NR management plans need to be prepared (or updated in some cases) and implemented to ensure that visitor facilities are available while biodiversity will not be adversely impacted. The main objective of this sub-component will be to strengthen the participating nature reserves. The NRs directly supported under this sub-component are: (i) Huangshan NSR, (ii) Qingliangfeng NNR, (iii) Jiulongfeng PNR, (iv) Wuxishan PNR, (v) Tianhushan County NR and (vi) Lingnan PNR (see Table 1 above and Appendices 7 and 8 for more detail). Activities supported under this sub-component will be guided by the development and implementation of long-term management (15 years) and medium term operational (5 year) plans. These plans will differ dependent on the NR. In the case of HNSR where there already exists a long-term master plan for the Scenic Reserve, the Project will support the development of a biodiversity conservation sector plan that will guide the integration of biodiversity conservation considerations and subsequent investments in the NSR (including support provided through the project, see sub-component 3.3 below).
- 67. A key output of this effort will be the formalization of biodiversity conservation as a management objective in the HNSR; one of the most visited NR in China. In the case of Qingliangfeng NNR and Jiulongfeng PNR (the first a national nature reserve and the second preparing to submit its application to initiate the process of upgrading to a NNR) the Project will support the development of comprehensive management and operational plans following State Forest Agency (SFA) criteria and "best-practice" examples from elsewhere in China. In contrast, the remaining NRs (Wuxishan PNR, Tianhushan County NR and Lingnan PNR) are all provincial or county nature reserves and have less capacity and resources and at this time are not capable of preparing a comprehensive and detailed management plan. As a consequence less detailed plans (termed framework plans) will be prepared. Nevertheless, the process of plan development will be the same and apply principles of bottom-up, staff-led participatory planning principles. Plan development will include: (i) baseline analysis and the establishment of a monitoring programme (see sub-component 2.6); (ii) a capacity-building programme (see sub-component 3.1); (iii) working with local communities and community outreach (see sub-component 2.2) and (iv) equipment and infrastructure including the installation and use of a GIS system in the six NRs to support biodiversity monitoring, surveillance and management. Project support will be provided through: (i) technical

assistance, (ii) equipment, (iii) infrastructure, and (iv) studies in support of preparation of management plans.

<u>Output 2.1.1</u> Sector plan promoting the integration of biodiversity conservation as management objective integrated into Huangshan NSR master management plan developed and under initial implementation.

<u>Output 2.1.2.</u> Management plans (2) and framework plans (3) for the remaining 5 project supported NRs developed and under initial implementation.

#### Sub-component 2.2: Co-management and Sustainable Development

- 68. Experiences in other Chinese nature reserves (e.g. in Guangxi Province) demonstrated that support for small-scale production activities in villages lying in proximity to nature reserves cannot only contribute to achieving both a real impact on improving livelihoods but also, through the establishment of co-management committees, facilitate partnerships between the villagers and NR staff eventually resulting in reduced impact on the NR biodiversity. This is achieved through facilitating stakeholder understanding and access to sustainable livelihood options and increased understanding of the importance of biodiversity and the role of NRs in its conservation or a combination of both. The main objective of this sub-component is to promote pilot activities designed to foster a positive relationship between the NRs and the surrounding communities, shift the current mode of production and livelihood activities to one resulting in increased incomes and contributing to less dependence on products obtained from the nature reserves and raise local awareness about the importance of biodiversity and the role of the reserve in its conservation.
- 69. Given the high profile food safety challenges in China, Chinese consumers have developed a heightened consciousness of these issues and are increasingly demanding natural products grown in ecological areas. The resulting increase in prices for healthy foods or environmental-friendly products (tea oil and torreya nut prices have increased 50% in the past 6 years) will benefit the farmers and provides an incentive to continue these activities after the completion of the project. GEF funds, combined with the baseline time contributions of the villagers themselves, will provide the investment catalyst to initiate these activities, such as land preparation, and seedling planting. After three years, they will begin to produce and begin to profit for the farmers.
- 70. During project preparation a survey of 44 local villages existing in proximity to 11 potential NRs under consideration for inclusion in the project was completed and analyzed. Once the list of 6 NRs was finalized (see sub-component 2.1) the survey was used to select the villages and respective sustainable production activities. These are: (i) bamboo: Fucun (HNSR), Chencun (HNSR) and Liangguancun (Wuxishan PNR) Villages; (ii) Chinese torreya nut: Shanlingcun Village (Jiulongfeng NNR); (iii) oil-tea camellia: Shenchecun Village (Tianhushan PNR); and (iv) forest ecological tourism: Shenchecun Village (Tianhushan PNR). A sustainability study including the survey results mentioned above was conducted to determine the economic sustainability of different production activities. The study concluded the listed activities to be socio-economically feasible and sustainable under the conditions in the relevant local communities. Based on the survey results and accompanying studies on economic returns and implementation feasibility, the market risk for introducing these practices was determined as "low".

71. The development of these activities will be facilitated through the creation of comanagement consultation committees (CCC) in each site. Community activities related to the respective nature reserve and the conservation of biodiversity will be led by NR staff. Technical support for the production activities will be provided by the local Forestry Bureau and Science and Technology Research Department. Participating villagers will provide land and labor arranged through a cooperative agreement signed between the CCC and the HSAC PMO. The Project will provide support through: (i) technical assistance, (ii) field trials and studies, (iii) production inputs, (iv) preparation and publication of operational manuals, (v) training in both the production activities and basic principles of biodiversity conservation and NR management and planning, and (vi) meetings of the co-management committees.

<u>Output 2.1.3.</u> Six local co-management community committees (CCCs) established to assist NR staff in conserving local biodiversity resources; successful implementation of identified sustainable production activities benefitting approximately 4000 people.<sup>7</sup>

## **Sub-component 2.3: Nature Reserve Network**

- 72. The objective of the sub-component is to design and implement coordination structures and processes the will turn the largely isolated 12 nature reserves of Tiers1, 2, and 3 into a closely interconnected network of collaborating areas that feature a systematic exchange of knowledge, information, experiences and practices.
- 73. The sub-component will facilitate this exchange through promoting coordination of activities between and among NRs at the planning and implementation level, mechanisms for collaboration among NR staff of different reserves, and joint use of infrastructure and equipment. This network approach will increase cost-efficiency of NR activities, including improvements in monitoring and enforcement as well as overall management effectiveness associated with data and information sharing.
- 74. The network approach will be supported by a corresponding web-based coordination system that will facilitate the flow of information and data and decrease the transaction costs of coordination and collaboration.
- 75. In addition to the six project supported priority nature reserves of Tier 1 and 2 (Huangshan NSR, Qingliangfeng NNR, Jiulongfeng PNR, Wuxishan PNR, Tianhushan County NR, and Lingnan PNR) the sub-component will also include the following six additional reserves of Tier 3: Gunjiujiang NNR, Shilishan PNR, Zhawan PNR, Tianhu PNR, Huashan County NR and Qiyunshan NSR (see Table 1). The development of the sub-component will be coordinated with a much broader effort led by the Municipal Government ("Smart Huangshan") designed to provide a shared Huangshan information base for users and includes the provision of infrastructure. It is expected that the network will support the generation and application of geo-referenced information relevant to the participating NRs and serve to: (i) provide an information tool to improve local NR planning and management decision-making, (ii) facilitate exchange of information between NRs and (iii) be compatible with the aforementioned Government-led initiative. The Project will support this sub-component through the provision of: (i) equipment, (ii) technical assistance, (iii) training and (iv) technical design studies.

<sup>&</sup>lt;sup>7</sup> The exact target numbers for average increase in income and biodiversity conservation will be defined during the establishment of each production activity during the first year of project implementation.

76. Work under this sub-component will be informed further during project implementation by the Nature Reserve System Plan to be developed under Output 1.2.1.

<u>Output 2.1.4.</u> Establishment of coordination and collaboration structures and processes enhancing interactions between NRs, including: a collaborative web-platform, joint planning and implementation of activities, new channels for information sharing, and management plans for joint usage of infrastructure and equipment.

# <u>Sub-component 2.4: Creating Landscapes/Corridors for Biodiversity Conservation and connectivity</u>

77. Work under this sub-component identifies and promotes interconnectivity between three existing, project supported nature reserves through the creation of a biodiversity friendly landscape representing 3,800 ha. The landscape will be created through the change in designation of land use from non-commercial forestry (NCF) to protection forest and through the development of guidelines for how to manage protection forests to conserve and enhance biodiversity and connectivity. This mainstreaming of biodiversity into productive forest management is a key element of long-term strengthening of protected area systems in Huangshan municipality. This small pilot is meant to serve as an example for additional future work to scale up and replicate the creation of biodiversity friendly landscapes for protected area management. The proposed landscape will connect Mt Wuxishan (Wuxishan PNR) and Jiulongfeng Peak (Jiulongfeng NNR) with the HNSR. Project support will be provided for: (i) legal expert and (ii) field study.

<u>Output 2.1.5.</u> 3,800 ha of biodiversity corridor created, supporting biodiversity conservation by assuring forest ecosystem connectivity between three NRs.

#### **Sub-component 2.5: Applied Competitive Research in NRs**

- 78. Science-based management and planning in nature reserves to better inform decision-making and the allocation of scarce resources does not presently exist in Huangshan. Where studies are supported they are typically *ad hoc* in nature, of short duration, and often not directly relevant to planning and management with results that cannot be easily translated into information to inform improved decision-making. GEF funding for applied research under this project is particularly justified in Huangshan municipality, which has a large financial and programmatic baseline that can be informed in future years by well designed and targeted research activities. Indeed, because this component is included in this project, this research is in effect being commissioned by its intended users a key recurring theme that has emerged from GEF's own review of applied research funding (see paragraph 14 of document footnoted below).
- 79. The objective of this sub-component is to create a culture of science-based management in selected participating nature reserves leading to improved management and planning decision-making supporting more effective conservation of biodiversity resources. This will be done through provision of support to sponsor a competitive challenge to research institutions and scientists to formulate targeted research grant proposals in response to specific selection criteria in support of the sub-component objective. This support will be in line with the overall goal of the GEF Biodiversity Focal Area, which is: the conservation and sustainable use of biodiversity and the maintenance of ecosystem goods and services.

- 80. The criteria for this selecting applied research proposals will be in line with the GEF Scientific and Technical Advisory Panel (STAP) key recommendations and recurrent themes as taken from recent reviews of GEF support for targeted or applied research. In order to be eligible for targeted/applied research funding from the project, proposed applied research concepts will be required to meet one the following technical and non-technical criteria as appropriate:
- Address one or both of the project's strategic priorities under GEF Biodiversity Focal Area Strategic Objective 1: Improve the sustainability of protected area systems; and/or Strategic Objective 2: Mainstream biodiversity conservation and sustainable use into production landscapes/ seascapes and sectors;
- Demonstrate ability to reduce and/or narrow information gaps constraining management decisionmaking and/or conservation of globally significant biological diversity;
- Demonstrate relevance to mainstreaming biodiversity conservation into productive sectors or strengthening capacity of protected area management networks;
- Consider scientific soundness of methodology and research implementation;
- Consider/demonstrate how research could help to catalyze additional investment in delivering global environmental benefits (globally significant biodiversity conserved/and or strengthened protected area networks);
- Include provisions for scientific review and validation of research results;
- Consider strategic fit and complementarity among applied research projects funded.

In addition to technical criteria, successful proposals will be required: to make provision for participation of NR staff and community members and/or civil society and the deposition of data in prescribed formats to facilitate inputting into the NR data base, and; to specify steps for the uptake of results by relevant management institutions. The uptake pathways will then be tracked by the project's M&E approach. Finally, the project's applied research work will liaise with the GEF's own knowledge management system to ensure that lessons learned are taken up by future projects. The design of the grant facility including the development of the "ground rules," selection criteria and review and selection of proposals would be the task of the Biodiversity Advisory Committee (BAC). Project support will consist of (i) technical assistance, (ii) research grants and (iii) limited support for publications not submitted to refereed journals.

Output 2.1.6. Competitive applied research grant program to support science-based management decision-making in project supported NRs.

#### **Sub-component 2.6: Studies and Monitoring of Ecosystem Health**

81. Despite the municipality's significant biodiversity endowment, large number of nature reserves, their potential importance to an increasing tourism-based economy and growing evidence of threats to Huangshan's main forest ecosystems (e.g., alien species and likely effects of climate change) there is no comprehensive, integrated monitoring program to assess and track the "health" of the ecological systems of Huangshan. Monitoring, such as it exists, is similar to the situation characteristic of science-based studies in the NRs, ad hoc and limited in time and scope. Work under this sub-component will design and implement an

<sup>&</sup>lt;sup>8</sup> The recent GEF supported GEF Council Meeting Paper from October 15, 2012: "Targeted Research: Proposals for Revising the Modality: Summary of Reviews Undertaken by STAP." As found online at: http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF.STAP\_.C.43.Inf\_.02\_Research%20within%20the%20GEF\_ Proposals% 20for% 20Revising% 20the% 20Targeted% 20Research% 20Modality.pdf <sup>9</sup> As recommended in the above.

integrated monitoring program that by definition will include the establishment of the necessary baselines (supported under separate project supported studies on biodiversity and socio-economic characteristics of communities in proximity to NRs).

82. The programme will include but not be limited to: (i) key biodiversity indicators (including those identified for the project-supported NRs), METT scorecards, key risks to the NR and broader municipal ecosystems (e.g., alien species and the effects of climate change). Monitoring stations will be established in the project-supported 12 NRs (including the six participating in the project supported network; see sub-component 2.3) but for technical reasons may include additional stations outside the NRs. Data will be collected and formatted to be able to be inserted in NR-specific geo-referenced information bases to support local management and planning capacity. Training will be provided and the incorporation of NR staff and villagers in selected monitoring activities will be emphasized. Project support consists of: (i) infrastructure, (ii) equipment, (iii) technical assistance, (iv) training, and (v) field support.

<u>Output 2.1.7</u>. Integrated monitoring program among project supported NRs operating and baseline established.

# Component 3: Capacity Building, Environmental Education and Public Awareness

83. The objective of this Component is to ensure the long-term sustainability of achievements logged in the first 5 years of the Project. This will primarily be achieved through increasing institutional capacity and raising and deepening public awareness, through both formal and informal means, of the importance of biodiversity conservation and the related role of NRs. This will be achieved through the following sub-components:

#### **Sub-component 3.1: Capacity Building**

- 84. In many respects this sub-component may play the most important role in securing project achievements following its closure. This will be no easy challenge. The Project will attempt to change an institutional culture in NR planning and management best characterized by a top-down approach and working in isolation with little participation from local communities and other stakeholders. Similarly, an equally difficult task will be faced in promoting the "mainstreaming" of biodiversity conservation principles traditionally confined in the Bureau of Environment into other line agencies. Through this sub-component GEF resources will be used to promote a shift to a more participative bottom-up planning and management approach beginning first in six priority NRs (Tiers 1 and 2) and secondly in Tier 3 (an additional 6 NRs) while in parallel laying the foundation to eventually incorporate the remaining municipal reserves.
- 85. Results and recommendations derived from the PPG-supported capacity building study recommended the provision of support for training and other capacity building activities targeting the following groups: (i) NR staff and their managers, (ii) senior government officials responsible for taking decisions that can affect biodiversity and ecosystem integrity and their technical staff, and (iii) local community leaders. In the case of the nature reserves, training will cover all 73 NRs in the Huangshan Municipality. Training modules may include but not be limited to: (i) nature reserve management, (ii) management and administration for protected areas, (iii) patrolling, (iv) field methodology and backcountry skills, (v)

conservation monitoring, (vi) biodiversity, ecology and biological conservation, (vii) community relations, (viii) community-based approaches to conservation, (ix) conservation education and extension and (x) tourism management for protected areas.

- 86. Topics for government officials and their staff are likely to include: (i) basic principles of system ecology and the linkages with biodiversity conservation, (ii) socio-economic importance of biodiversity in Huangshan, (iii) the basics of policy formulation and potential adverse environmental impacts and (iv) the use of Environmental and Strategic Environmental Assessments to mitigate potential impacts.
- 87. Capacity building efforts targeting community leaders would likely focus on the importance of biodiversity and the roles and responsibilities of nature reserves in its conservation and their relevance to the community including the potential opportunities for increasing livelihoods as the sector develops in Huangshan.
- 88. The approach for all target groups will be based on a "training of trainers" methodology to be carried out by locally recruited Expert Trainers who themselves will receive training. Given the significant differences in capacity between national and county NR staff, training will have to be structured accordingly. Project support will consist of: (i) technical assistance, (ii) pre- and post-training assessments (studies), (iii) development of training materials and (iv) support for training workshops.
  - <u>Output 3.1.1</u>. A master training plan to guide training activities throughout the 5 year life of project (LOP).

Output 3.1.2. An estimated 600 NR staff, 280 government official and 120 community leaders trained over LOP.

#### **Sub-component 3.2: Environmental Education**

- 89. Huangshan has a long track record in support of environmental education through the establishment of "green schools" consisting of selected schools that provide content on the environment. Students in participating primary and secondary schools are exposed to 12 periods on environment education every year. This effort has yet to be institutionalized to the rest of the school system and teaching materials do not include any content on biodiversity.
- 90. Building on these experiences, the approach to this sub-component is three-fold: (i) first develop a long-term education plan that provides both the details and content needed to implement the pilot activities and their subsequent up-scaling and integration into the remainder of the public school system; (ii) the development and testing of biodiversity modules supported with texts to be integrated into existing environmental teaching periods in primary and secondary pilot schools; and (iii) provision of "readers" consisting of a range of written articles on biodiversity oriented toward primary and secondary students, respectively. These will be deposited in the libraries of every municipal school an updated on an annual basis. Project support will be mainly through provision of: (i) technical assistance, (ii) training of teachers, (iii) development of promotional materials and teaching materials and (iv) purchase of equipment to upgrade libraries in selected schools.

Output 3.2.1. A public education plan to guide project supported activities over LOP.

Output 3.2.2. Biodiversity-based curricula applied in pilot primary (1) and secondary (1) schools.

<u>Output 3.2.3.</u> Annual primary and secondary school readers compiling biodiversity related material for Huangshan school system.

# **Sub-component 3.3: Public Awareness**

- 91. The objective of this sub-component is to increase public awareness and build the public and political support needed to ensure future phases of the Project primarily through consolidating the achievements in and "up scaling" of the experiences and "lessons-learned" from the initial 6 Nature Reserves, supported under sub-component 2.1, and NR-specific public awareness activities, also supported and budgeted under sub-component 2.1, will be complemented by this sub-component through the creation of a "world class" interpretation centre and upgrading 80 kilometers of existing trails in Huangshan National Scenic Reserve (HNSR) to expose the some 2 million visitors per year not only to the Reserve's biodiversity resources but also to the other nature resources present in Huangshan Municipality and the presence and role of nature reserves in their conservation.
- 92. Taking advantage of the proposed construction of a new 1,200 mt<sup>2</sup> interpretation centre the Project will support the design and development of exhibits, media events and provision of public learning and educational materials to promote the message of biodiversity conservation. Similarly, the interpretive materials would be designed to avail of the more than 80 kilometers of existing trails to provide for an informative and enjoyable visit for tourists to the NSR and foster a better understanding of the Reserve's ecosystem and characteristic biodiversity resources. Other activities supported under this sub-component will include media events, annual evaluations of exhibits and selected rotations and training to interpretive centre staff in biodiversity conservation principles and their relevance to HNSR. Specifically under the sub-component the Project will support: (i) infrastructure construction (including signage), (ii) purchase of equipment, (iii) technical assistance, (iv) training (v) media events and (vi) public information materials.

Output 3.3.1. "World class" biodiversity interpretation centre in HNSR.

Output 3.3.2. 80 km of trails in HNSR posted with biodiversity conservation interpretive materials.

## Component 4: Information Dissemination and M&E

93. The objectives of Component 4 are two-fold and mutually-complementary: (i) first, to promote the wider dissemination of project generated experiences and "lessons-learned" to other nature reserves in both Huangshan and elsewhere in China where biodiversity is increasingly at risk due to the growth in tourism; and (ii) ensure the systematic results-based monitoring and evaluation of project progress towards achieving project outputs and outcome targets as established in the Project Results Framework.

#### **Sub-component 4.1: Information Dissemination**

94. Under the information dissemination sub-component specific activities supported by the Project include: (i) creation of a project webpage; and (ii) an assessment, publication and dissemination of at least five "best practices" achieved under the Project. The distilling of

project experiences and products in "best practices" publications will be important for the replication and scaling up of project experiences to other Chinese nature reserves as well as support further mainstreaming of biodiversity and ecosystems conservation in sector policies and programmes. Project support for this sub-component will be primary for: (i) technical assistance; (ii) media events; (iii) design and maintenance of the project webpage; (iv) editing, printing and dissemination of "best-practice" reports; and (v) facilitating peer-to-peer consultations among NR staff.

Output 4.1.1. A project webpage to facilitate the dissemination of project experiences and "lessons-learned."

Output 4.1.2. Publication of five project-related "best-practices" in biodiversity conservation.

Output 4.1.3. Five peer-to-peer consultative workshops for NR staff.

# **Sub-component 4.2: Monitoring & Evaluation**

95. The objective of the monitoring sub-component is to ensure the systematic collection of data needed to monitor and document project outcomes and to provide the means to compile, analyze and disseminate information on project background, progress and experiences and "lessons learned" supported under the previous sub-component. Project support will consist primarily in: (i) the contracting of a full-time M&E specialist, (ii) design and establishment of an M&E system and (iii) mid-term and final evaluations supported with their respective workshops. For further details please see sections 4.5 Monitoring and Reporting, 4.6 Provision for Evaluations, and 4.7 Communication of Project Results and Visibility.

<u>Output 4.1.4:</u> Project monitoring system providing six-monthly reports on progress in achieving project outputs and outcomes

Output 4.2.5. Midterm and final evaluations carried out and reports disseminated.

#### 2.5 GLOBAL ENVIRONMENTAL BENEFITS

- 96. Global environmental benefits (GEB) to be achieved through the Project include:
- (i) Direct strengthening of 12 national and provincial reserves to better conserve biodiversity of global significance that in aggregate represent 67,496 ha (1<sup>st</sup>,2<sup>nd</sup> & 3<sup>rd</sup> Tier reserves) through improved management planning (Tiers 1-2) and participation in the creation of a NR network and capacity building activities (the 6 national and provincial reserves in the 3<sup>rd</sup> Tier).
- (ii) Indirect strengthening of an additional 60 county reserves representing a total of 35,504 ha through training and access to PA network resources and information (all Tier 4);
- (iii) Biological diversity conservation objectives and practices mainstreamed into a total of 50,414 hectares of productive forest and agriculture land.
  - (a) establishment of a biologically friendly landscape measuring an estimated 3,800 ha in size connecting Mt Wuxishan (Wuxishan PNR) and Jiulongfeng Peak (Jiulongfeng NNR) with the HNSR; and

- (b) improving the sustainability of an estimated 46,614 ha of agricultural lands through project-supported efforts to "main-stream" biodiversity considerations in policies and regulation in this priority sector.
- (iv) Unique bamboo forest in Qingliangfeng NR maintains its 40 species composition.
- (v) Number of giant spiny frog *Paa spinosa* (IUCN VU) found in 1,000 meter transects in target PA streams is maintained or increases.
- (vi) Stable population and condition of endemic Huangshan pine (*Pinus hwangshanensis*) in HNSR.
- 97. The success of these efforts will be measured through a set of specific indicators (see Appendix 1) including the monitoring of several selected indicator species. Increasing or maintaining the population sizes of these species, despite intensifying pressures on biodiversity in the project area, will prove the effectiveness of the project activities. Over the longer-term, results derived from the integrated monitoring of the ecological health of Huangshan's main ecosystems including threats associated with alien species and climate change are expected to lead to more informed decision-making leading to improved functioning of forest ecosystems and processes and ultimately positive contributions to the mitigation of global warming.
- 98. Finally, there exists substantial opportunities for replication of the experiences and "lessons learned" derived from project supported activities particularly in terms of striking a sustainable balance between biodiversity conservation objectives with tourism development; a growing issue in China's protected area system. The dissemination of these "products" from the proposed project is likely to be catalytic in launching similar approaches in other parks in both China and elsewhere in the world.

#### 2.6 COST EFFECTIVENESS (alternative strategies and methodologies considered)

99. Efficiencies will be achieved primarily through: (i) the multi-phased and tiered approach adopted in project design, and (ii) improving management effectiveness among individual NRs. As noted above, no single project could address the range of issues in such a large group as 73 PAs; any attempt to do so would likely result in dilution of impact due to limited resources available for individual reserves. In response, project design adopted a multiphase, multi-Tiered approach to Huangshan's municipal system of PAs. This approach is designed to achieve immediate results in selected Reserves in the first 5 years while in parallel establishing a firm foundation through policies, training and public awareness to support up scaling in subsequent phases. With respect to the second point, given growing and increasingly affluent middle class in China, increased environmental awareness and demand for improved environmental quality, public allocation of resources in support of nature reserves is not a constraint. However, due to capacity limitations many of these resources are poorly used and often do not achieve their intended purpose. Building capacity in the country's nature reserves, particularly in the preparation of a "bottom-up" and participatory approach to planning and management of the reserves will result in more efficient targeting and utilization of national budgetary resources. It is expected that the successful piloting and recognition of the innovative activities in NR management supported under the Project will serve as the basis for scaling up to other NRs both in Huangshan and beyond resulting in similar savings at reduced costs.

100. While arguably not a GEB, there is substantial opportunity for the Project to avail of the some 2 million visitors, received by the Huangshan NSR each year, to promote an increased public awareness of the significance of the province's and municipality's biodiversity

endowment and the role of Huangshan NRs in its conservation; an approach that should be highly cost-effective and build the support needed to make project outcomes sustainable.

#### 2.7 INNOVATIVENESS

101. The approach adopted by the project is innovative for Huangshan Municipality, but also in the overall context of biodiversity conservation in natural reserves at the provincial and national level as it will lead to and demonstrate the benefits of a fundamental change in the culture of management of NRs. At present, NR management could generally be characterized as top down, closed and non-participatory with management interventions taken in the absence of any scientific and technical basis. By the end of the Project this institutional culture is expected to change significantly in selected pilot NRs (1st and 2nd Tier reserves) and be characterized by a bottom-up approach, community consultation (through the CCCs), linkages to other key institutional stakeholders and the integration of technical and scientific inputs into the management plan preparation process. Building on the initial experiences and "lessons learned" from the initial 6 NRs, it is expected that by including all the municipal reserves in the Project (e.g., through networking, training and/or peer-to-peer consultations), together with the establishment of an enabling policy framework, institutional arrangements and increased awareness among decision-makers and the public at large, the initial approach will be replicated to many of the remaining municipal NRs (Tier 3 and 4 reserves) in subsequent phases.

#### **SECTION 3 – FEASABILITY**

#### 3.1 ENVIRONMENTAL IMPACT ASSESSMENT

102. The goal of the Project is to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The Project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of HNSR to strengthen and upgrade the existing municipal system of PAs. The main project outcomes include: (i) creation of an integrated approach to the conservation and management of forest biodiversity supported by a coherent policy, planning and institutional framework in Huangshan Municipality; (ii) an increase in average management efficiency in 6 project supported nature reserves (35,586 ha) included in the municipal network of 12 NRs, (iii) an increased institutional capacity and public and political support for the conservation of biodiversity in China's forest ecosystems; and (iv) evidence that "lessons learned" from the project are being taken up and replicated elsewhere in the non-participating NRs. The associated Global Environmental Benefits (GEBs) are: (i) the strengthening of 6 national, provincial and county reserves to better conserve biodiversity of global significance that in aggregate represent 35,586 ha (1st and 2nd Tier reserves); (ii) supporting an additional 6 national and provincial reserves (3rd Tier, additional 31,909 ha) through participation in the creation of NR network encompassing Tiers 1-3; and support an additional 60 county reserves (4th Tier, additional 35,504 ha) through participation in training and capacity development (all 4 Tiers); (iii) establishment of a biodiversity friendly landscape measuring an estimated 3,800 ha in size connecting Mt Wuxishan (Wuxishan PNR) and Jiulongfeng Peak (Jiulongfeng NNR) with the HNSR; and (iv) improving the sustainability of an estimated 46,614 ha of agricultural lands through project-supported efforts to "main-stream" biodiversity considerations in policies and regulation in this priority sector. Over the longer-term, results derived from the integrated monitoring of the ecological health of Huangshan's main ecosystems including threats associated with alien species and climate change are expected to lead to more informed decision-making leading to improved functioning of forest ecosystems and processes and ultimately positive contributions to the mitigation of global warming. Based on this project profile no adverse environmental or social impacts are likely and it conforms to FAO's pre-approved list of projects excluded from a detailed environmental assessment as a category "C" project in FAO's EIA system.

Project Category C		Yes	No
I affirm that I have performed an environmental review of this project and certify that	t the	X	
project conforms to the pre-approved list of projects excluded from environment	ental		
assessment and that the project will have minimal or no adverse environmental or so	ocial		
impacts. No further analysis is required.			

#### 3.2 RISK MANAGEMENT

103. Project risks have been identified and analyzed during the full project preparation and mitigation measures have been incorporated in the project design (see section 3.2.1 below).

104. With the support from and under the supervision of FAO the HSAC's Bureau of Gardens and Forests (BGF) will be responsible for the day-to-day management of these risks and the implementation of effective mitigation measures. HSAC/BGF is also responsible for monitoring the effectiveness of mitigation measures and adjusting mitigation strategies as

needed as well as identifying and managing any eventual new risks not foreseen during project development in dialogue with FAO and other concerned project partners.

105. The six-monthly Project Progress Report (PPR; see section 4.5.3) is the main tool for project risk monitoring and management. The reports include a section on systematic follow-up on identified risks and mitigation actions in previous reporting periods and another section for identification of eventual new risks or risks that still needs attention, their rating and mitigation actions including by whom and by when they should be completed. FAO will monitor the project risk management closely and follow up if needed providing support for the adjustment and implementation of risk mitigation strategies. Reporting on risk monitoring and rating will also be part of the annual Project Implementation Review (PIR) prepared by FAO and submitted to the GEF Secretariat (see section 4.5.3).

### 3.2.1 Risks and mitigation measures

106. Risks identified during the preparation of the PIF for the achievement of the project objectives and results have been further analyzed during the preparation phase and additional risks have been identified and analyzed as part of the project risk assessment. Mitigation measures has in each case been developed and incorporated in the full project design. Table 2 below summarizes all risks identified, their rating, and mitigation measures incorporated in the design of project components.

Table 2: Risks for Achievement of Project Outcomes, their Rating and Respective Mitigation Strategies and Measures

Risk	Rating	Risk Mitigation Measures		
	Risk Type			
Inter-institutional Coordination. Poor coordination among protected areas administered by different line agencies could undermine the achievement of conservation objectives by limiting the effectiveness of human and financial resources in improving management of individual NRs and their networks.	Low to medium	Project design has provided for adequate resources, both in terms of time and financing, to support the needed consultation and participation to reach an agreed vision, strategy (the master plan) and priority actions to be supported by the project. During project preparation, initial consultative efforts laid the basis for the development of the necessary institutional arrangements to support project objectives. These resulted in the establishment of the Biodiversity Consultative Committee (BCC) led by the municipal government leaders with representatives from all participating sectors. Over the longer term, the sustainability of the approach will be supported through the project's policy, institutional arrangements and strengthening and public awareness activities. During implementation, it will be the primary task of the PMO to ensure that the necessary institutional arrangements and consultation continue and to identify and resolve any potential issues early before they begin to affect implementation.		
Policy Formulation. Slow uptake of policy recommendations stemming from project supported policy studies could prolong the current situation characterized by growing threats to forest biodiversity, low management	Medium	As a risk, this was addressed in project design through promoting a number of capacity building and public awareness raising activities in support of relevant policy reforms directed at both key decision makers as well as the public at large and includes site visits to areas where policy related studies and related activities are being supported. Working directly with the		

effectiveness and limited inter- institutional collaboration in response to existing threats and constraints.		Municipal mayor's office through the BCC will facilitate policy reform. To monitor performance, the project has integrated tracking tools (in its M&E system). During the project inception workshop a proposal to integrate these with well defined triggers to ensure a timely integration of policy reforms into municipal policy frameworks will be introduced and discussed.
Co-financing. Insufficient and timely provision of co-financing	Low	Environmental protection is becoming a high priority issue at all political levels in China including the conservation of biodiversity. The availability of cofinancing is not judged to be a significant issue, particularly in the relatively well-developed municipality such as Huangshan. This assessment is further supported by the high priority that the government is placing on ecotourism for the municipality's future development and economic well-being.
Climate Change. Climate change as manifested through increased drought and heightened risk of forest fire could undermine the achievement of biodiversity conservation objectives.	Low	The project will integrate <i>inter-alia</i> climate risks and climate proofing measures into the NR management plan preparation process as well as the planning process of specific NRs to promote the integration of adaptation measures. Similarly, climate change variation will be taken into account in the monitoring programme and working with local communities in identification and piloting of alternative / sustainable livelihoods to account for climatic variability. The project will also forge linkages and synergies with ongoing projects and efforts to mainstream adaptation and to contribute to the knowledge base through its information dissemination and public awareness activities.
Invasive Species. Forest pests (and other invasive species possibly associated with climate change) could affect the ecological "health" of the forest ecosystems targeted by the project.	Medium	The project will support a science based monitoring program to provide advance warning of possible outbreaks of pests and/or evidence of invasive species. Protocols will be established among NRs participating in the network for facilitate a coherent and costeffective response to this risk.
<u>Currency</u> <u>Risk</u> . Significant fluctuation in foreign currency exchange rates may pose a risk to the achievement of all project outputs and outcomes.	Medium	This has been addressed through incorporating appropriate price contingencies in the project budget.

#### 3.2.2 Fiduciary risk analysis and mitigation measures

107. China's overall fiduciary environment was characterized in the World Bank Country Partnership Strategy (CPS) with China 2009-2012 as improving with some weaknesses. Procurement of goods and works seemed to be done through competitive transparent bidding processes, but the contracting of consultants was assessed to be not always competitive but more based on already established relationships with research institutions than ensuring that a consultant with the correct qualifications able to deliver quality products is hired for the job. The financial management was assessed to be of medium quality. As a consequence the World Bank (WB) has in the last five years provided substantial training to the Ministry of Finance (MOF) staff in public financial management and supervision complying with international acceptable standards. Project financial management is now undertaken in

accordance with Circular 13 issued by the MOF for all donor funds. Further, the China National Audit Office (CNAO) Foreign Funds Application Audit Department conducts audits of projects. CNAO is also increasing its focus on performance audits and assessment of sustainable development. The results of the project financial and performance audits are now made available to the public. The WB CPS with China 2013-2016 states that the Bank will continue to support greater use of country systems for financial management, procurement, contracting, monitoring and control. The WB and the Asian Development Bank are working together to help harmonize procurement legislation and prepare model bidding documents. The Governments own systems for financial management is already harmonized with international fiduciary standards and best practices. The Project to be executed by the HSAC (see section 4.2) will benefit from these improved capacities and instruments at the national level.

108. As part of the project preparation an assessment of HSAC's fiduciary standards and related risks for the project execution were undertaken. The assessment included HSAC's regulations, systems, procedures and capacities to comply with FAO and GEF fiduciary standards for management of funds and contracting and procurement processes as well as project progress and output quality monitoring and reporting. As a result of the assessment the overall fiduciary risk was rated as low to moderate mainly because HSAC has no previous experience in managing international funds, however, this risk can easily be mitigated because of the solid systems and procedures the HSAC is using and the high capacity and commitment of its staff demonstrated during project preparation. The full assessment is available on FAO Field Project Management Information System (FPMIS). The HSAC has solid experience in managing development programmes for Huangshan's tourism region including the protection of ecosystems and forestry biodiversity. On average, HSAC executes approximately USD 7.5 million annually. Already during the project preparation the HSAC has set up a Project Management Office (PMO) for the present project in its Bureau of Garden and Forestry with 1 part time and 3 full time qualified staff assigned with solid experience in project management including financial and procurement management. The office has delivered timely and quality management of the project design process including the management of local consultants and coordination of project design activities.

109. Financial management and accounting is done in accordance with China's public Institution Accounting Norms and China's Public Institution Financial Management Regulations issued in 1990 and later updated to International Accounting Standards. In August 2012 HSAC issued "Financial Management and Fund Approval Procedures and Regulations for Governmental Project Funds", which is now implemented in all bureaus and offices under the HSCA and include regulations of principles and procedures for procurement. HSCA has also implemented an accounting system strictly following the national norms and aligned with International Accounting Standards. Procurement and contracting are governed by the Governmental Procurement low of the People's Republic of China stipulating procurement modalities, tendering procedures, contracting arrangements, complaints procedures, inspection, etc. and ensuring transparency, competitiveness and cost-effective use of public funds. The HCAC has an independent internal audit department performing annual audits of projects and external audits are performed by the Huangshan Municipal Audit Bureau under CNAO.

110. In relation to project planning, monitoring and reporting HSAC does not have previous experience in Results Based Project management including work planning, progress reporting

and financial management based on a Results Framework, which needs to be mitigated through training of PMO staff in the project inception period. Also minor weaknesses were detected in classification and management of project related documents and dissemination of information to all partners as part of the project's information management system. The assessment also flags the funds flow via the Anhui Provincial Bureau of Finance, foreseen for this project (see section 4.2 below), as a potential risk for delays in project execution. In general, even though HSAC/BGF/PMO staffs have high capacity in financial, procurement and project management, they will need to be trained in FAO formats and procedures in relation to the transfer and management of funds.

111. To mitigate the minor fiduciary risks identified in the fiduciary risk assessment a Mitigation Plan for Fiduciary Risks was agreed to between the FAO Representation in China and the HSAC/BGF including deadlines for actions to be taken linked to funds transfer as presented in table 3 below:

**Table 3: Mitigation Plan for Fiduciary Risks** 

Identified	Causes	Impacts	Mitigation measures and actions for
risks		•	correction
Funds Flow  Accounting	Fund flow through MOF and APFC/BGF	Might delay the fund flow from FAO to HSAC/BGF  Risk is moderate and manageable  Reduce the accounting	FAO, HSFC/BGF will coordinate with APFC on the fund transfer issues and sign a Tripartite Project Execution Agreement to be signed by FAO, APFC and HSAC for ensuring the timely fund flow and effective disbursement  FAO and HSAC/BGF will sign a Project
Policies and financial formats and Procedures	staff are unfamiliar with policies, procedures, and formats of FAO	and financial management efficiency of HSAC/BGF  Risk is moderate and manageable	Execution Agreement with specific description of the agreed policies, procedures and responsibilities of each party to ensure smooth implementation.  HSAC/BGF should prepare a Project Implementation Manual (PIM) based on the project Executing Agreement signed by FAO, MOF and HSAC/BGF with more detail description on accounting and financial management and reporting procedures and steps aligned to FAO and MOF policies, and regulations. The PIM shall also include whom to report to in case of suspicion of frauds, waste, or misuse of GEF funds and details responsibilities in the daily management within HSAC/BGF. The PIM should be submitted and cleared by FAO. Time of action: before first disbursement.  FAO and MOF will provide training of HSAC/BGF financial management staff on FAO and MOF account and financial management policies, procedures, reporting formats, accounting methodologies, etc. Time of action: Before second

			11.1
			disbursement.
Reporting and	HSAC/BGF staff	May cause difficulty	Incorporate detailed roles and
Monitoring	are unfamiliar	and problems in the	responsibilities (putting emphasis on
	with, reporting	project initiating period	HSAC/BGF responsibilities for field
	formats and		supervision visits to give technical support
	procedures for		to NRs and activities on-the-ground to
	project progress		achieve quality project outputs and
	monitoring		outcomes), formats and steps for project
			progress monitoring into the PIM. Time of
	HSAC/BGF staff	May cause difficulties	action: before first disbursement.
	has no experience	in project planning and	
	in Results based	progress monitoring	FAO training of HSAC/BGF staff in FAO
	Project	and ultimately in	project monitoring and progress reporting
	Management	timely achievement of	based on Results Based Management
	based on a	results	(RBM). Time of action: Before second
	Results		disbursement.
	Framework	Moderate risk, can be	
	approach	mitigated through	
		training	
Project	Project	Affect the information	HSAC/BGF should: (i) unify the file and
Information	documents and	sharing and preparation	document management and appoint one
Systems	reports are not	of project audits and	responsible staff; (ii) establish a user-
	systematically	evaluation reports	friendly unified document management
	managed,		catalogue and document retrieve list. Time
	categorized and		of action: Before second disbursement; and
	unified		(ii) define project dissemination and
			communication strategy in particular with
			NRs and related communities

#### SECTION 4 – IMPLEMENTATION and MANAGEMENT ARRANGEMENTS

#### 4.1 INSTITUTIONAL ARRANGEMENTS

- 112. Huangshan's Administrative Committee (HSAC) is a government entity established in 1987 under the administration of the Huangshan Municipal Government and is chaired by the Huangshan Municipal Governor in his role as Director General (DG). Among other tasks HSAC is responsible for the planning and implementing of socio-economic development programs, the development of the Huangshan Tourism Region and the conservation and protection of ecosystems, forestry biodiversity and wildlife protection through the Division of Resource Protection and Management's Bureau of Garden and Forestry (BGF). The BGF will be the Project's designated Execution Partner (EP).
- 113. FAO and HSAC will work in close collaboration with executing agencies of other projects to identify opportunities and facilitate mechanisms to achieve synergies between relevant GEF and other donor-supported projects. These efforts will be facilitated through: (i) FAO's participation on the CBPFA partner roundtable, (ii) FAO participation in MOF-sponsored events for GEF IAs/EAs working in China; (iii) informal communications between the GEF Agencies and (iv) sharing of data and dissemination materials between projects.
- 114. At the level of the NR project execution will be implemented through the respective NR administrative offices. Coordination and exchange of information at the NR level will be facilitated through NR staff participation in relevant public fora, cross-site visits, exchange of information, postings on the project webpage and mailings of relevant publications and newsletter. In particular the project should seek coordination with the following initiatives that differ by ecosystem but share many common approaches and principles:
- Guangxi Integrated Forestry Development and Conservation Project (though scheduled to be closed in June 2013 the PMO has been extended into 2014);
- Demonstration of Estuarine Biodiversity Conservation and Restoration and Protected Areas Network Project; and
- Strengthening the Management Effectiveness of the Wetland Protected Area System in Hainan for Conservation of Globally Significant Biodiversity (and the parent China Wetland Programme)

### **4.2 IMPLEMENTATION ARRANGEMENTS**

115. The Food and Agriculture Organization (FAO) will be the GEF Agency responsible for supervision and provision of technical guidance during the implementation of the Project. The Executing Partner (EP) responsible for the project execution will be the Huangshan Administrative Committee (HSAC) represented by HSAC's Bureau of Garden and Forestry (BGF). Specifically, the Project will be implemented through the creation of a Project Management Office (PMO) inside the BGF which will be expanded and diversified office of the PMO created during project preparation (see Figure 2). More detail is provided below.

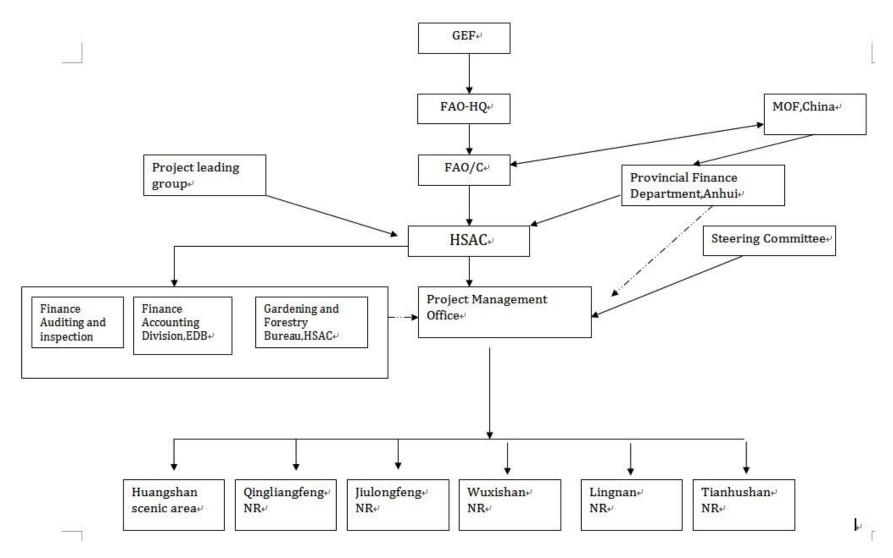


Figure 2. Institutional Arrangements for Implementation of the Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **China: National Level**

116. **Ministry of Finance (MOF)** is the GEF Operational Focal point of China responsible for coordinating the programming of GEF resources and overseeing the China GEF portfolio with the GEF Agencies. In this capacity MOF will be responsible for: monitoring and review of annual Project Implementation Review Reports and organization of post project impact and evaluation studies (national evaluation of project) which will be shared with all project partners.

#### **China: Provincial Level**

- 117. **Anhui Provincial Bureau of Finance (PBOF)** will be the recipient of GEF grant from FAO on behalf of the Chinese Government. BOF's specific responsibilities will be:
- transfer of funds to HSAC as the Executing Partner;
- monitor and review of financial reports and their submission to FAO accompanied by work plan, budget and funds transfer requests for the subsequent reporting period; and
- management of a special grant account.

### **China: Municipal Level**

118. The **Huangshan Administrative Committee** (HSAC) will be the **project Executing Partner** (EP) represented by HSAC's Bureau of Garden and Forestry (BGF) as the designated unit for project execution.

119. During project preparation a Project Management Office (PMO) was established in BGF in December 2011 together with a Project Leading Group (PLG) responsible for interinstitutional coordination headed by the Municipal Governor. The PMO recruited a local project management team, effectively coordinated the project preparation work, recruited the local consultants providing analysis and inputs for project reparation and received and supported international consultants. The existing PMO will be expanded and diversified to support project implementation. The DG of the GFB will be nominated as the PMO director. The PLG will be retained and will continue to be led by the municipal governor.

120. The Executing Partner, HSAC represented by the BGF will be directly responsible for:

- daily management and coordination of the project;
- technical implementation of project activities; and
- day-to-day monitoring as well as financial management and purchase of goods, minor works, and services (procurement) in accordance with own rules and procedures adjusted to FAO rules and regulations.

121. HSAC will enter into an Execution Agreement with FAO and PBOF allowing for the purchase of goods, minor works, and services needed to execute the project. FAO will ensure that the HSAC rules and procedures for project execution are acceptable in accordance with FAO rules and regulations and GEF minimum fiduciary standards, and HSAC will follow in particular rules defined in the Execution Agreement. The Execution Agreement will outline in details the roles and responsibilities of HSAC and procedures with respect to financial management, procurement, recruitment, project progress reporting, financial reporting and audit, copyright, and other legal aspects of collaboration. A detailed Project Implementation Manual (PIM) will be prepared by the HSAC and cleared by FAO before the first transfer of funds. The Manual will establish rules, detailed procedures and responsibilities in relation to

all aspects of the project operation based on the Execution Agreement, rules and regulations of the HSAC, and financial rules and regulations of the PBOF.

122. HSAC will use its own financial management, output and outcome monitoring, and procurement systems and procedures adjusted to FAO Rules and GEF minimum fiduciary standards. HSAC will submit procurement and contract documentation for prior clearance (see section 4.4 below), six-monthly statements of expenditures, and cash transfer requests (see section 4.3.6 below) based on the updated AWP/B including a detailed budget for the following six months period, and annual audited financial statements to the FAO Representation in China. Further, HSAC will prepare and submit to the FAO Representation Project Progress Reports, annual Work Plans and budgets, and all documentation needed for the preparation of the annual PIR (see section 4.5.3 below). The institutional arrangements for project implementation provide for the use of the existing structure within the HSAC and will be primarily through the BGF.

123. **Bureau of Garden and Forests (BGF).** The BGF will be the focal point for all formal exchanges and collaboration with international agencies. The Bureau will be responsible for:

- planning and monitoring of the technical aspects of the Project, including regular project visits and monitoring progress in achieving project outcomes and outputs, preparation and submission to FAO of periodic progress and technical reports and regular consultations with beneficiaries and contractors;
- chairing the Project Steering Committee (PSC) and annual review meetings;
- developing and reviewing work plans;
- procuring goods and services on a transparent and competitive basis (e.g., review and approval of TOR/specifications for personnel/contractors/vendors and required bidding documentation and awarding and entering into contracts of recruitment or procurement with support from FAO China Office;
- maintaining a separate project account for project funds;
- ensuring funds are used in accordance with agreed work plans and the project budget,
- preparing, authorizing and adjusting commitments and expenditures,
- ensuring timely disbursement, financial recording and reporting against output based budgets and work plans (in English);
- coordinating the financing from FAO/GEF with that from other sources;
- resource mobilization of baseline and co-financing as stated in the project document;
- maintaining productive, regular and professional communication with FAO and other project partners to ensure the smooth progress of project implementation.

124. **Project Management Office (PMO)** will be established in HSAC's Bureau of Gardening and will be responsible for day-to-day project operations. The role of the PMO will be, in close consultation with the PLG and BAC members, to ensure the coordination and execution of the Project through the timely and efficient implementation of annual work plans. The PMO will act as secretariat to the PSC. It will coordinate work and follow closely the implementation of project activities, handle day-to-day project issues and requirements, coordinate project interventions with other on-going activities and ensure a high degree of national and local inter-institutional collaboration, monitor project progress and ensure the timely delivery of inputs and outputs. It will be responsible for implementing the project's M&E plan, managing its monitoring system and communication programme, the elaboration of Semi-annual Project Progress and Financial reports and assist in the preparation of the annual Project Implementation Review (PIR) and midterm and final evaluations of the Project. This would be achieved by preparing and coordinating the implementation of the

AWP/B to be approved by the PSC. Reports on these activities, and project activities, outputs and financial expenditures and status for the previous year will be submitted together with the Annual Work Plan and detailed budget to the PSC via HSAC's Project Coordinator, BCC and FAO. The PMO will also be responsible for facilitating the involvement of civil society organizations into the project as appropriate, in consultation with Green Anhui.

125. The PMO will consist of the following staff to be financed by counterpart funds: i) a fulltime national project manager in charge of project daily management and technical supervision including, preparing AWP/B and allocating tasks to NRs, preparing TOR and technical requirements for consultancy services contracting documents and material and equipment procurement documents, providing technical supervision and guidance to the NRs and other project partners in implementing project activities, conducting regular field supervision visits and provide on-site guidance to NR technical staff, day-to-day coordination and communication with NR and other partners participating in the GEF project, and support the preparing the project progress reports; ii) a full time reporting and contract's officer in charge of contracting processes following established rules and procedures in the PIM and managing issued contracts; iii) a full time administrative assistant and translator. The PMO team will be complemented with a contracted with GEF resources that will strengthen the HSAC's capacity to comply with all FAO rules and procedures under the execution of the GEF funds. The senior technical expert and M&E specialist will support the project coordinator with technical and operational guidance, assist in the preparation of the English version of Project Progress Reports, monitor the progress in achieving project outcome and output indicators, and propose eventual shifts in project implementation strategies if the project is not performing as planned. In addition the BGF will also provide office space, equipment and utilities and finance logistics and travel as a counterpart contribution to project management.

### **GEF Agency**

126. As the Project's associated GEF Executing Agency the Food and Agriculture Organization (FAO) will provide supervision and technical guidance services during the project execution. Administration of the GEF grant will be in compliance with the rules and procedures of FAO and in accordance with the agreement between FAO and the GEF Trustee. In its capacity as the GEF agency FAO will:

- Manage and disburse funds from GEF in accordance with the rules and procedures of FAO:
- Enter into an Execution Agreement with Huangshan Administrative Committee as the national executing agency for the provision of services to the project and the Anhui Provincial Bureau of Finance which will be the funds recipient;
- Oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers and the rules and procedures of FAO;
- Provide technical guidance to ensure that appropriate technical quality is applied to all activities concerned conservation, restoration and NR networking;
- Carry out at least one supervision mission per year; and
- Report to the GEF Secretariat and Evaluation Office through the annual Project Implementation Review on project progress and provide financial reports to the GEF Trustee.

127. **The FAO Representative in China**, assisted by the FAO Project Task Manager (see below), will be the Budget Holder (BH) and responsible for the management of the GEF resources and all aspects in the Execution Agreement that will be signed between FAO and

HSAC. As a first step in project start-up, the FAO Representation in China will establish an interdisciplinary Project Task Force within FAO to guide the implementation of the Project. The FAO Representative will in particular be responsible for: (i) disbursement of GEF funds to PBOF based on satisfactory reporting on project progress and statement of expenditures (see section 4.3.6 on disbursements and section 4.5.3 on reporting; (ii) review of financial reports and supervision of HSAC's financial management and use of resources (see section 4.3.6 on financial management and section 4.5.3 on reporting), including clearance of Budget Revisions in consultation with the FAO Lead Technical Officer (LTO see below) for submission to TCI/GEF Coordination Unit for approval; and (3) supervision of contracting and procurement processes executed by HSAC (see section 4.4 below).

128. The FAO Representative will, in consultation with the FAO Lead Technical Officer (LTO), Lead Technical Unit (LTU) (see below) and the GEF Coordination Unit, give no-objection to Annual Work Plans and Budgets (AWP/B) submitted by HSAC. Disbursement of GEF funds for the provision of goods, minor works and services to the Project will be carried out by the FAO Representative in accordance with the provisions of the Execution Agreement. The disbursement will be carried out upon submission by the HSAC to the FAO Representation of semi-annual financial statements of expenditures, procurement and contract documentation, and disbursement requests based on an updated AWP/B including detailed budget for the following six months period to be cleared and approved by the Representative. Further, the disbursements are also subject to submission of a Project Progress Report to be approved by the FAO LTO. The Budget Holder will submit the financial statement of expenditures, the disbursements requests, and the Project Progress Report to the GEF Coordination Unit in the Investment Centre Division (TCI) for clearance and uploading on the FPMIS before the disbursement can be finally approved by the Representative.

129. A Project Task Manager (PTM) will be appointed by FAO in the FAO Office in China in consultation with the LTO, LTU and the GEF Unit. The PTM will, under direct supervision of the FAO Representative in China, support the FAO Representative in the supervision of financial management, project progress, procurement and contracting processes and in the provision of technical guidance to the project, in close consultation with the LTO, and the Project Task Force. The PTM will be paid from GEF fee resources and will have the following main tasks:

- Review project progress reports from HSAC and submit them to the LTO for approval and to the GEF Coordination Unit for final approval and uploading on the FPMIS;
- Participate in annual project progress review and planning workshops, and review, provide comments, and advise the FAO Representative on giving no-objection to AWP/B in consultation with the LTO, LTU and the GEF Coordination Unit;
- Review procurement and contract documentation submitted by HSAC for procurement and contracts to be financed by GEF resources and advise the FAO Representative on giving no-objection, in close consultation with the LTO and the GEF Coordination Unit;
- Review HSAC project financial statement of expenditures using GEF resources and Cash Transfer Requests of GEF resources in accordance with the AWP/B and previous Cash Transfer Requests submitted by HSAC and advise the FAO Representative on his/her clearance of statements of expenditures and approval of cash transfers in consultation with the LTO and the GEF Coordination Unit;
- Review reports on executed co-financing to be submitted by HSAC;
- Conduct periodic supervision missions and support the provision of FAO technical and results-based management input to the project;

- Support the LTU in preparation of the annual Project Implementation Review (PIR) report;
- Represent FAO in the Project Steering Committee (see below) and interview and selection panels for key project positions to be financed by GEF resources;
- Prepare draft TOR for mid-term and final evaluations and support their organization, in consultation with the FAO Evaluation Office, the LTO, the LTU and the GEF Coordination Unit; contribute to the development of an eventual agreed adjustment plan in project execution approach and supervise its implementation.
- 130. <u>The FAO Lead Technical Unit (LTU).</u> The Forest Assessment Management and Conservation Division (FOM) of FAO's Forestry Department will be the LTU for this project and will provide overall technical guidance to its implementation. FOM will delegate the responsibility for direct technical supervision to the FAO Regional Office for Asia Pacific (RAP) Natural Resources and Environment Group (NREG).
- 131. **FAO Lead Technical Officer (LTO)** The Senior Forestry Officer of NREG will be the LTO for the Project. Under the general technical oversight of the LTU, the LTO will provide technical guidance to the project team to ensure delivery of quality technical outputs. The LTO will coordinate the provision of appropriate technical backstopping from all the concerned FAO units represented in the Project Task Force responding to requests from the HSAC. The Project Task Force is thus composed of technical officers from the participating units (see below) and of operational officers and is chaired by the BH. The LTO, supported by the LTU when needed, will be responsible for:
- review and ensure clearance by the relevant FAO technical officers of all the technical Terms of Reference (TOR), LOAs, and contracts to be performed under the project and to CVs and technical proposals short-listed by the HSAC for key project positions, goods, minor works, and services to be financed by GEF resources;
- supported by the FAO Project Task Manager, review and insure clearance by the relevant FAO technical officers of final technical products delivered by consultants and contract holders financed by GEF resources before the final payment can be processed;
- assist with review and provision of technical comments to draft technical products/reports on request from the HSAC during project execution;
- review and approve project progress reports submitted by HCAP to the FAO Representation in China in coordination with the FAO Project Task Manager;
- support the FAO Representative in reviewing, revising and giving no-objection to AWP/B submitted by the HCAP and to be approved by the Project Steering Committee;
- prepare the annual Project Implementation Review report, supported by the FAO Project Task Manager and inputs from the HCAP, to be submitted for clearance and completion by the GEF Coordination (TCI) which will subsequently submit the PIR to the GEF Secretariat and Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio. The LTO, supported by the Project Task Manager, must ensure that HCAP has provided information on co-financing provided during the course of the year for inclusion in the PIR;
- field annual (or as needed) project supervision missions;
- review and revise TORs for the mid-term evaluation, participate in the mid-term evaluation workshop with all key project stakeholders, development of an eventual agreed adjustment plan in project execution approach, and supervise its implementation supported by the FAO Project Task Manager.

- review and revise TORs for the final evaluation, participate in the final project closure workshop with all key project stakeholders and the development of and follow up on recommendations on how to insure sustainability of project outputs and results after the end of the project.
- 132. <u>Participating units</u> from across FAO will be involved in supporting the project's work and in ensuring that the project stays on track to achieve its overall objectives and indicators of success. When appropriate, these units within RAP or HQ will provide technical support in areas such as: forest and watershed management, sustainable cropland and climate smart agriculture, land management, gender, climate change vulnerability assessment and adaptation. The Asia and Pacific Service (TCIB) of the FAO Investment Centre Division will provide adaptive management support and results-based management oversight and guidance to the LTO and the participating units.
- 133. The **GEF Coordination Unit (TCI)** will review and approve project progress reports, project reviews, and financial reports and budget revisions. The GEF Coordination Unit will review and clear the annual PIR and undertake supervision missions if considered necessary. The PIRs will be included in the FAO GEF Annual Monitoring Review submitted to GEF by the GEF Coordination Unit. The GEF Coordination Unit will also participate in the mid-term and final evaluations and the development of corrective actions in the project implementation strategy in the case needed to mitigate eventual risks affecting the timely and effective implementation of the project. The GEF Coordination Unit will in collaboration with the FAO Finance Division request transfer of project funds from the GEF Trustee based on sixmonthly projections of funds needed. The GEF Coordination Unit will support the FOA Representation in China in all aspects of supervising the NEX implementation modality that this project is following.
- 134. **The FAO Finance Division** will provide annual Financial Reports to the GEF Trustee and, in collaboration with the GEF Coordination Unit, call for project funds on a six-monthly basis from the GEF Trustee.

### **Committees and working groups**

- 135. **Project Leading Group (PLG).** The PLG was established during project preparation headed by the mayor of Huangshan Municipal Government and led by the Deputy Director General of Anhui Provincial Forestry Department. The PLG consists of Secretary General of the Huangshan Municipal Government, DG of Huangshan Municipal Development and Reform Committee, DG of Huangshan Municipal Forestry Bureau, DDG of HM Finance Bureau (MBOF), DG of Development and Reform Bureau and DG of BGF. The specific responsibilities of the PLG will be:
- overall policy formulation;
- facilitating cooperation between HSAC and the participating provincial and municipal bureaus in support of the Project;
- advising the BGF/PMO on other, on-going and planned activities; and if needed
- conflict resolution.

It is expected that the PLG will evolve into the BCC supported under sub-component 1.3.

136. **Project Steering Committee (PSC).** The PSC will be chaired by the Director General of BGF and meet minimum one time per year and its specific responsibilities will be:

- setting out project-specific policy guidance to the BGF/PMO in conformity with broader policies established by the PLG above;
- review and approval of the Project's AWP/B /see section 4.5.3);
- review and approval of semi-annual progress and financial reports (see section 4.5.3);
- facilitating collaboration between the Project and other GEF-supported projects and liaising with other project relevant units in the HSAC/BGF.

Composition will include: MOF, PBOF, MBOF, HSAC, HTDC, Yixian County Bureau of Forestry, Green Anhui, FAO and an elected member representing the 5 participating villages on a rotation basis.

137. **Biodiversity Advisory Committee (BAC)** will be a technical body created to support the Project and composed of technical staff from HNSR complemented with the participation of recognized experts in the conservation of biodiversity and nature reserve management. The main tasks of the BAC will be to: a) provide technical advice to the BCC and the PSC, b) backstop the PMO on request; and c) advise the Office on other on-going and planned activities and facilitate collaboration between the Project and other GEF-supported projects and/or sector agencies. Specifically the BAC will be responsible for: (i) technical evaluation of project progress, (ii) evaluation if project objectives and outcomes can be met within the allocated time frame, and (iii) identification of possible solutions and/or changes in project activities when technical issues arise in the course of project implementation. The BAC is scheduled to meet formerly twice a year to review the draft Semi-annual Progress Report and next year AWP/B. In addition, it will meet on an *ad hoc* basis as required.

#### 4.3 FINANCIAL PLANNING AND MANAGEMENT

### 4.3.1 Financial plan (by sub-component, outputs and co-financier)

138. The total cost of the Project will be USD 13.12 million, to be financed through a USD 2.61 million GEF grant and USD 10.51 million in co-financing from: (i) HSAC (USD 5.47 million); (ii) Yixian County Bureau of Forestry (USD 0.09 million); (iii) Huangshan Municipal Bureau of Finance (USD 3.9 million); (iv) Huangshan Tourism Development Corporation (USD 0.37 million); (v) local Village Producers Councils (USD 0.44 million); and iv) FAO (USD 0.23 million). Table 4 shows project costs by component, outputs and sources of financing followed by Table 5 that shows the sources and type of confirmed cofinancing. FAO will, as the GEF Agency, only be responsible for the execution of the GEF resources and the FAO co-financing.

**Table 4: Project Budget Summary** 

Component/output	HSAC	Yixian County Bureau of Forestry	Huangshan Municipal Bureau of Finance	Huangshan Tourism Development Company	Village Councils	FAO	Total Co- financing	% Co- financing	GEF	% GEF	Total
Component 1: Policy, Planning & Institutional Arrangements	121,500					60,000	181,500	47%	203,340	53%	384,840
O 1.1.1: Three implementing guidelines (policies) for: (i) the conservation of biodiversity, (ii) establishment of a municipal NR system and (iii) management of alien species in Huangshan municipality.	17,300					-	17,300	20%	69,600	80%	86,900
O 1.1.2: Two draft policies addressing specific biodiversity conservation issues TBD during project implementation	,	-	-	-	1	ı	-	0%	5,600	100%	5,600
O 1.1.3: Three long-term plans to guide the implementation of the three project supported policies (Output 1.1.1)	81,600	-	-	-	1	60,000	141,600	62%	87,600	38%	229,200
O 1.1.4: A permanent Biodiversity Committee (policy)	11,300	-	-	-	-	-	11,300	38%	18,700	62%	30,000
O 1.1.5: EA permanent Biodiversity Advisory Committee (technical)	11,300	_	-	-	-	-	11,300	34%	21,840	66%	33,140
Component 2: Improved NR Management Effectiveness & Networks	3,513,300	88,200	3,900,000	372,000	436,500	177,900	8,487,900	85%	1,470,134	15%	9,958,034
O 2.1.1: Biodiversity sector plan contributing to a strengthened Huangshan NSR master management plan.	200,000	-	-	-	-	-	200,000	55%	166,484	45%	366,484
O 2.1.2: Management plans (2) and framework plans (3) for the remaining 5 project supported NRs.	1,079,400	88,200	3,900,000	-	-	177,900	5,245,500	94%	340,435	6%	5,585,935
O 2.1.3: Six local community conservation committees (CCCs) to support local sustainable production pilot activities	507,700	-	-	-	436,500	1	944,200	85%	161,117	15%	1,105,317
O 2.1.4: Computer-based NR Network for Huangshan NRs	-	-	-	372,000	-	_	372,000	70%	155,906	30%	527,906
O 2.1.5: Creating Landscapes to Support Biodiversity Conservation	5,200	-	-	-	-	-	5,200	14%	31,400	86%	36,600

O 2.1.6: Competitive applied research grant program its support science-based											
management decision-making in project supported NRs	13,900	-	_	-	_	_	13,900	5%	277,992	95%	291,892
O 2.1.7: Integrated monitoring program among project supported NRs	1,707,100	-	-	-	-	-	1,707,100	84%	336,800	16%	2,043,900
Component 3: Capacity Building, Environmental Education and Public Awareness	1,385,212						1,385,212	73%	507,899	27%	1,893,110
O 3.1.1: Master training plan	1,365,212	-	•	•	-	-	1,303,212	0%	55,140	100%	55,140
O 3.1.2: 600 NR staff, 280 government	-	-	-	-	-	-	_	070	33,140	10070	33,140
officials and 120 community leaders trained	105,800	-	•	-	-	-	105,800	24%	337,103	76%	442,902
O 3.2.1: Public education plan	7,300	-		-	-	-	7,300	100%	-	0%	7,300
O 3.2.2: Biodiversity-based curricula in pilot primary (1) and secondary (1) schools	47,700	-	-	_	_	-	47,700	88%	6,420	12%	54,120
O 3.2.3 Primary and secondary school readers compiling biodiversity related material for Huangshan school system	267,30 <b>0</b>	-	-	-	-	_	267,300	99%	4,000	1%	271,300
O 3.3.1 "World class" biodiversity interpretation centre in Huangshan National Scenic Reserve	612,700	_	_	_	_	_	612,700	92%	54.836	8%	667,536
O 3.3.2 80 km of trails in HNSR posted with biodiversity conservation interpretive materials	344,412		_			_	344,412	87%	50,400	13%	394,812
Component 4: Information Dissemination and M&E	,	_			_	_	,		,		
O 4.1.1: Project webpage	<b>167,400</b> 67,400	-	-	-	-	-	167,400 67,400	<b>45%</b> 91%	301,600 6,700	55% 9%	369,000 74,100
O 4.1.2: Project-webpage O 4.1.2: Project-related "best-practices" in biodiversity conservation O 4.1.3: Peer-to peer consultative workshops for NR staff.	100,000	-	-				100,000	80%	106,700	20%	206,700
O 4.1.4: Six-monthly project progress reports O 4.1.5: Midterm and final evaluations carried out and reports disseminated.	-	-	-	-	-	-	-	0%	188,200	100%	188,200
Project management	286,200	-	-	-	-	-	286,200	70%	124,300	30%	410,500
Total Project	5,473,612	88,200	3,900,000	372,000	436,500	237,900	10,508,212	80%	2,607,273	20%	13,115,485

**Table 5: Source and Type of Confirmed Co-financing** 

Name of Co-financier (source)	Classification	Туре	Project	%
Huangshan Administration Committee (HSAC)	Municipal Government	Cash	4,620,512	44.0
Huangshan Administration Committee (HSAC)	Municipal Government	In-kind	853,100	8.1
Yixian County Bureau of Forestry	County Government	Cash	88,200	0.8
Huangshan Municipal Bureau of Finance (MBOF)	Provincial Government	Cash	3,900,000	37.1
Huangshan Tourism Development Authority (HTDA)	Municipal Government	Cash	372,000	3.5
Local village producers	Local communities	In-kind	436,500	4.2
FAO	GEF Agency	In-kind	237,900	2.3
Total Co-financing			10,508,212	100

### 4.3.2 GEF inputs

139. The requested GEF grant will be allocated mainly in support of capacity building through the provision of technical assistance, training, policy and legal studies preparation of plans, applied research grants in support of more informed decision making at the level of specific nature reserves, promotion of pilot co-management models, limited procurement of equipment and biodiversity conservation interpretation tools and publications for awareness raising and education on the importance of biodiversity conservation and the related role.

### 4.3.3 Government inputs

140. The government in-kind co-financing will mainly consist in staff time, office space and utilities, and support for local travel. The government cash co-financing will support improvement of infrastructure of visitors and education centers in the NRs, equipment for strengthening of participating nature reserves, the establishment of an integrated ecosystem monitoring programme, and public education and capacity building.

### 4.3.4 FAO inputs

- 141. The contribution to the project includes FAO regular programme as well as project and other extra budgetary related resources comprising staff time (in-kind), travel (cash) and other operating expenses devoted to collaboration with and technical advice to the project. In particular FAO support will be provided in the following areas as outlined in the project document:
- Capacity building and institutional strengthening in ecosystem based forest protected area management to increase and improve the provision of goods and services from forest and mountain ecosystems.
- 2. Capacity building and institutional strengthening in formulation, implementation and enforcement of policies, regulations and planning to mainstream biodiversity conservation into productive sectors such as eco-tourism, forestry and agriculture.
- 3. Awareness raising in forest biodiversity and ecosystem services conservation in protected area and tourism management.
- 4. Capacity building for improving rural livelihoods through enhanced co-management of protected areas and for sustainable livelihood development.

#### 4.3.5 Other co-financiers inputs

142. Local villager participating in the co-management models will contribute with cofinancing in terms of their time in the development of sustainable development activities in areas adjacent to project supported nature reserves.

# 4.3.6 Financial management of and reporting on GEF resources

143. Financial management and reporting in relation to the GEF resources will be carried out in accordance with FAO's rules and procedures and as described in the Execution Agreement between FAO, HSAC and PBOF. In accordance with the project budget, FAO shall provide cash advances in US dollars up to the total of USD 2 607 273.

144. HSAC shall provide project execution services in accordance with its own regulations, rules and procedures adjusted to FAO rules and regulations and GEF minimum fiduciary standards as established in the Execution Agreement to ensure that the project funds are properly administered and expended. HSAC shall maintain a project account for the funds received from FAO in accordance with accepted accounting standards.

### Financial statements and reporting

145. All financial reporting shall be in US dollars, and any exchange differences accounted for within the GEF-approved US dollar project budget. Within 15 days of the end of each sixmonth, i.e. on or before 15 July and 15 January, HSAC shall submit six-monthly statements of expenditure of GEF resources to the FAO Office in China (see format in Execution Agreement in Appendix 6.C). The purpose of the financial statement is to list the expenditures incurred on the project on a six monthly basis so as to monitor project progress and to reconcile outstanding advances during the six-month period. The financial statement shall contain information that forms the basis of a periodic financial review and its timely submission will be a prerequisite to the continued disbursements of funds to HSAC via PBOF.

146. HSAC shall prepare annual financial reports on the use of the GEF resources to be submitted with the  $2^{nd}$  six monthly Project Progress Report, showing amount budgeted for the year, amount expended since the beginning of the year, including un-liquidated obligations (commitments) as follows:

- details of project expenditures on an output-by-output basis, reported in line with project budget lines as set out in the project budget included in this Project Document appendix 3, as at 31 December each year;
- a final statement of account in line with the project budget included in this Project Document appendix 3, reflecting actual final expenditures under the project, when all obligations have been liquidated; and
- an annual budget revision will be prepared for review and clearance of the FAO Representation in China, LTO, and the GEF Coordination Unit. The budget revision will be posted in the FPMIS by the GEF Coordination Unit.

147. These financial reports will be submitted by the HSAC to the PBOF and the FAO Representation in China and reviewed and cleared by the FAO Representative supported by

the Project Task Manager, monitored by the LTO, and with previous internal clearance from the FAO GEF Coordination Unit.

148. Financial reports for submission to the donor (GEF) will be prepared in accordance with the provisions in the Financial Procedures Agreement with the GEF Trustee and submitted by the FAO Finance Division (CSFE).

### **Disbursements of Funds**

149. FAO shall transfer the amount of **USD 2 607 273** of GEF funds payable in installments as outlined below, to HSAC via the PBOF to carry out the GEF financed project activities as described in this Project Document. HSAC shall prepare and submit to PBOF and the FAO, together with the Annual Work Plan, a detailed budget to facilitate the predictability of the needed funds for the year. The first installment of USD 130 353 (5 per cent of the approved GEF amount) shall be advanced to HSAC via PBOF within two weeks following signature of the Execution Agreement subject to submission by HSAC to FAO of all progress and completion reports on all actions agreed in the mitigation plan of fiduciary risks (as referred to in section 3.2.2) with the exemption of training of PMO staff in reporting and monitoring and the establishment of a unified document management system which should be completed in the end of the first reporting period.

150. Subsequently, HSAC shall prepare and submit to PBOF and FAO cash transfer requests (see format Execution agreement Annex 4.D) based on the updated AWP/B including the budget for the following six month together with the six-monthly statements of expenditures of GEF resources. The second and subsequent installments shall be advanced to the HSAC via the PBOF within two weeks upon submission of a satisfactory financial statement of expenditures report, project progress reports (see section 4.5.3 below), and an updated AWP/B including the budget for the following six month. The FAO Representative in China, supported by the FAO Project Task Manager, should certify that reporting requirements under the terms of the Execution Agreement have been met and that project progress reports for the activities completed have been submitted to and accepted by FAO as showing satisfactory management and use of GEF resources. Reports should be submitted to the LTO/LTU for review and the GEF Coordination for review and clearance of the cash transfer request. All reports should be posted on the FPMIS.

### **Responsibility for Cost Overruns**

151. FAO will make available to the Executing Partner a financial contribution in the amount of USD 2 607 273 (two million six hundred and seven thousand and fifty-five United States Dollars). HSAC shall utilize the GEF project funds in strict compliance with the project document. HSAC shall be authorized to make variations not exceeding 20 per cent on any total output budget line or any cost category line of the project budget provided that the total allocated for the specific budgeted project component is not exceeded and the reallocation of funds does not impact the achievement of any project output as per the project Results Framework Appendix 1. Any variations exceeding 20 per cent on any total output budget line or any cost category line that may be necessary for the proper and successful implementation of the project, shall be subject to prior consultations with and approval by FAO. In such a case, a revision to the FAO-GEF budget in the project document should be prepared by HSAC and approved by the FAO Representative in China, the LTO and the GEF coordination Unit. Cost overruns shall be the sole responsibility of the HSAC.

# **Audit**

152. HSAC and PBOF will ensure external audit, consistent with recognized international auditing standards, of its accounts and records in relation to activities and expenditures related to the project. The audit reports will be provided to FAO and may be shared with the GEF Trustee if this is requested. HSAC and PBOF shall submit to FAO an annual externally audited financial statement of the GEF project account within three months following the completion of each annual accounting period during the project.

#### **4.4 PROCUREMENT**

153. HSAC will procure the equipment and services provided for in the detailed budget Appendix 3 of this Project Document and AWP/B following its own rules and regulations in compliance with generally accepted international standards for public sector procurement as detailed in the Execution Agreement. HSAC will ensure that its procurement rules and procedures and their implementation ensure that the procurement process is transparent fair and competitive.

154. Before the commencement of procurement, HSAC shall update the project procurement plan (Appendix 5, to be prepared following project approval) to be reviewed at the project inception and cleared by the FAO Representative in China. The procurement plan shall be updated by HSAC every six months and submitted to and cleared by the FAO Representative in China with the six-monthly financial statement of expenditure report, Project Progress Report, and Cash Transfer Requests for the next installment of funds. FAO supervision of contracting and procurement processes will be executed as follows:<sup>10</sup>

- all individual consultants contracts for an amount > USD 20 000 will be subject to FAO participation in selection panel and prior clearance of contracting process, Terms of Reference (TORs) and Curriculum Vitae (CVs);
- all consultant firms/NGOs contracts will be subject to FAO prior clearance of contracting process, TOR and technical proposals;
- there will be no single procurement of goods (non-expendable procurement) for an amount > USD 100 000. All procurement of goods will be subject to FAO prior clearance of bidding process, material and offers (single procurement amount < USD 100 000 and > USD 50 000) or technical specifications and price quotation comparison (single procurement amount < USD 50 000); and
- all documentation related to non-expendable procurement and procurement of nonconsultancy services in relation to training and workshops events shall be submitted to FAO for post review together with the six-monthly Financial Statements of Expenditures reports.

### 4.5 MONITORING AND REPORTING

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These procedures for supervision of contracting and procurement processes will be revised after the first project year where some of the prior clearances by FAO of contracts and procurements may not be required depending on the performance of HSAC in managing contracting and procurement processes

155. Monitoring and evaluation of progress in achieving project results and objectives will be done based on the targets and indicators established in the Project Results Framework (Appendix 1 and described in section 2.3 and 2.4 above). The project Monitoring and Evaluation Plan has been budgeted at USD 196 700 (see Table 6). Monitoring and evaluation activities will follow FAO and GEF monitoring and evaluation policies and guidelines. Supported by Component 4 the project monitoring and evaluation system led by a full-time M&E specialist will also facilitate learning and mainstreaming of project outcomes and lessons learned in relation to participatory planning, co-management models, use of science based field research to inform and improved the planning and management of nature reserves and the "mainstreaming" of biodiversity conservation considerations in sector policies and development plans.

### 4.5.1 Oversight and monitoring responsibilities

156. The M&E tasks and responsibilities, clearly defined in the project's detailed Monitoring Plan (see below), will be achieved through: (i) day-to-day monitoring and supervision missions of project progress (PMO and NR Project Managers); (ii) technical monitoring of biodiversity and ecosystem "status" indicators (PMO and NR managers in coordination with other relevant participating provincial technical units); (iii) specific monitoring plans for comanagement activities and for the implementation of the landscapes to support biodiversity conservation plans (PMO and NR managers with support from local village producers and other stakeholders); (iv) midterm and final evaluations (independent consultants and FAO Evaluation Office); and (v) continual oversight, monitoring and supervision missions (FAO). 157. At the initiation of project implementation the PMO through the M&E specialist will set up a project progress monitoring system coordinated with counterpart systems in each of the project-supported NR administrations. Participatory mechanisms and methodologies for systematic data collection and recording will be developed in support of outcome and output indicator monitoring and evaluation. During the inception workshop (see section 4.5.3 below), M&E related tasks to be addressed and finalized will include: (i) presentation and clarification (if needed) of the project's Results framework with all project stakeholders; (ii) review of the M&E indicators and their baseline; (iii) drafting the required clauses to include in consultants' contracts to ensure they complete their M&E reporting functions (if relevant); and (iv) clarification of the respective M&E tasks among the Project's different stakeholders. One of the main outputs of the workshop will be a detailed monitoring plan agreed to by all stakeholders based on the monitoring and evaluation plan summery presented in section 4.5.4 below.

158. The day-to-day monitoring of the Project implementation will be the responsibility of the PMO led by the M&E specialist and driven by the preparation and implementation of an AWP/B followed up through six-monthly PPRs. The preparation of the AWP/B and six-monthly PPRs will represent the product of a unified planning process between main project partners. As tools for results-based-management (RBM), the AWP/B will identify the actions proposed for the coming project year and provide the necessary details on output targets to be achieved, and the PPRs will report on the monitoring of the implementation of actions and the achievement of output targets. NR-specific inputs to the AWP/B and the PPRs will be prepared based on participatory planning and progress review with local stakeholders and coordinated through the PMO and NR managers and facilitated through project planning and progress review workshops. These inputs would be consolidated by the respective NR managers before forwarding them to the PMO who will consolidate into a draft AWP/B and PPRs. An annual project progress review and planning meeting should be held with the

participation of the PMO and the NR Administrations to finalize the AWP/B and PPRs. Subsequently the AWP/B and PPRs will be submitted to the PSC for approval (AWP/B) and Review (PPRs) and to FAO for approval. The AWP/B will be developed in a manner consistent with the project's Results Framework to ensure adequate fulfillment and monitoring of project outputs and outcomes.

159. Following the approval of the Project, the project's first year AWP/B will be adjusted (either reduced or expanded in time) to synchronize it with an annual reporting calendar. In subsequent years, the FSP work plan and budget will follow an annual preparation and reporting cycle as specified in section 4.5.3 below.

#### 4.5.2 Indicators and information sources

160. To monitor project outputs and outcomes including contributions to global environmental benefits specific indicators have been established in the Results Framework (see Appendix 1). The framework's indicators and means of verification will be applied to monitor both project performance and impact. Following FAO's monitoring procedures and progress reporting formats data collected will be of sufficient detail to be able to track specific outputs and outcomes and flag project risks early on. Output target indicators will be monitored on a six-monthly basis and outcome target indicators will be monitored on an annual basis if possible or as part of the mid-term and final evaluations.

161. The project output and outcome indicators have incorporated a number of on-the-ground impacts and progress in building and consolidating capacities in participating partners.

On-the-ground impact indicators will track changes in:

- biodiversity including number of indicator species classified as vulnerable under protected Category II in Anhui Province and decrease in number of vulnerable species under the IUCN VU category due to decline in illegal hunting and improved environmental quality as a result of decrease in the use of agro-chemicals. The baseline and target for these indicators can be found in the Project Results Framework and will be monitored as part of the NR's biodiversity monitoring systems. Other indicators for ecosystem health will be selected and monitored as part of the establishment of the integrated monitoring programme under sub-component 2.7. (see output 2.1.7 above);
- visitation to project support NRs over the life of the project associated with investment and supporting activities leading to increasing awareness among visitors of the presence and role of nature reserves in Huangshan Municipality;

The capacity building process indicators will capture:

- management effectiveness in the 6 project supported NRs focusing in particular on tracking the development and implementation of their respective 5 year operational plans and the effects
- the development and implementation of a master training plan and the tracking the numbers of NR staff, government officials trained over the life of the project;
- policies, planning and institutional mechanism instruments developed to support project objectives; and
- adoption of biodiversity conservation considerations in policies and legal instruments through tracking changes in sector policies in the Agriculture, Forestry and Tourism

sectors.

162. The main sources of information to support the M&E program will be: (i) the NR's biodiversity monitoring systems and the integrated monitoring programme (sub-component 2.7); (ii) participative progress monitoring and workshops with beneficiaries; (iii) on-site monitoring of the implementation of co-management activities, landscapes supporting biodiversity conservation, and management effectiveness in project supported NRs; (iv) publications resulting from the applied research grant sub-component; (v) project progress reports prepared by the PMO with inputs from the NR Project Managers; (vi) consultants reports; (vii) participants training tests and evaluations; (viii) mid-term and final evaluations completed by independent consultants; (ix) financial reports and budget revisions; (x) Project Implementation Reviews prepared by the FAO Lead Technical Officer supported by the Project Task Manager in the FAO Office in Beijing and the PMO; (xi) FAO supervision mission reports; and (xii) post project impact and evaluation studies (national evaluation of project) organized by the Ministry of Finance and shared with all project partners.

### 4.5.3 Reports and their schedule

- 163. Specific reports that will be prepared under the M&E program are: (i) Project inception report; Annual Work Plan and Budget (AWP/B); (iii) Project Progress Reports (PPRs); (iv) annual Project Implementation Review (PIR); (v) Technical Reports; (vi) co-financing Reports; and (vii) Terminal Report. In addition, assessment of the GEF Monitoring Evaluation Tracking Tools (METTs) against the baseline (completed during project preparation) will be required at midterm and final project evaluation.
- 164. <u>Project Inception Report.</u> After FAO approval of the Project and signature of the Execution Agreement an inception workshop will be held. Immediately after the workshop, PMO will prepare a project inception report in consultation with the FAO Project Task Manager and other project partners. The report will include a narrative on the institutional roles and responsibilities and coordinating action of project partners, progress to date on project establishment and start-up activities and an update of any changed external conditions that may affect project implementation. It will also include a detailed first year AWP/B, a detailed project monitoring plan based on the monitoring and evaluation plan summery presented in section 4.5.4 below, and a progress and completion report on all actions agreed in the mitigation plan of fiduciary risks (as referred to in section 3.2.2). The draft inception report will be circulated to FAO and the PSC for review and comments before its finalization, no later than three months after project start-up. The report should be cleared by the FAO BH, LTO, LTU and the FAO GEF Coordination Unit and uploaded in FPMIS by the LTO.
- 165. Annual Work Plan and Budget (AWP/B). HSAC/BGF will submit to the FAO Representation in China a draft Annual Work Plan and Budget no later than 10 January. The AWP/B should include detailed activities to be implemented by project outputs and divided into monthly timeframes and targets and milestone dates for output indicators to be achieved during the year. A detailed project budget for the activities to be implemented during the year should also be included together with all monitoring and supervision activities required during the year. The draft AWP/B is circulated to and reviewed by the FAO Project Task Force, HSAC/BGF/PMO incorporates eventual comments and the final AWP/B is send to the PSC for approval and to the FAO for final no-objection and upload in FPMIS by the GEF Coordination Unit. (See AWP/B format in Execution Agreement Annex 4.B).

- 166. **Project Progress Reports (PPR):** HSAC/BGF/PMO will prepare six-monthly PPRs and submit them to the FAO Representation in China no later than July 15 (covering the period January through June) and 15 January (covering the period July through December). The 1<sup>st</sup> semester six months report should be accompanied by the updated AWP/B, for review and no-objection by FAO. The PPR are used to identify constraints, problems or bottlenecks that impede timely implementation and take appropriate remedial action. PPRs will be prepared based on the systematic monitoring of output and outcome indicators identified in the project's Results Framework (Appendix 1). The FAO Project Task Manager will review the progress reports and collect and consolidates eventual FAO comments from the LTO, LTU, the GEF Coordination Unit, and the Budget Holder Office and provide these comments to the HSAC/BGF/PMO. When comments have been duly incorporated the LTO will give final approval and submit the final PPR to the GEF coordination Unit for final clearance and upload in FPMIS. (See PPR format in Execution Agreement Annex 4.A).
- 167. Annual Project Implementation Review (PIR): The LTO supported by the LTU, the FAO Project Task Manager and with inputs from the HSAC/BGF/PMO, will prepare an annual PIR covering the period July (the previous year) through June (current year) to be submitted to the GEF Coordination Unit for review and approval no later than 31 July. The GEF Coordination will upload the final report on FAO FPMIS and submit it to the GEF Secretariat and Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio. The GEF Coordination Unit will provide the updated format when the first PIR is due.
- 168. <u>Technical Reports:</u> Technical reports will be prepared as part of project outputs and to document and share project outcomes and lessons learned. The drafts of any technical reports must be submitted by HSAC to the FAO Representation in China who will share it with the LTO and LTU for review and clearance and to the GEF Coordination Unit for information and eventual comments, prior to finalization and publication. Copies of the technical reports will be distributed to the PSC and other project partners as appropriate. The final reports will be posted on the FAO FPMIS by the LTO.
- 169. <u>Co-financing Reports:</u> HSAC/PMO will be responsible for collecting the required information and reporting on in-kind and cash co-financing provided by HSAC, Yixian County Bureau of Forestry, Huangshan Municipal Bureau of Finance (MBOF), HTDC and local village producer councils and eventual other partners not foreseen in the Project Document. HSAC/BGF/PMO will submit the report to the FAO Representation in China (which will add the FAO co-financing) in a timely manner on or before 31 July covering the period July (the previous year) through June (current year). (See co-financing report format in Execution Agreement Annex 4.E).
- 170. **GEF-5 Tracking Tools**: Following the GEF policies and procedures, the tracking tools for the biodiversity focal area will be submitted at three moments: (i) with the project document at CEO endorsement; (ii) at the project's mid-term evaluation; and (iii) with the project's final evaluation or final completion report.
- 171. **Terminal Report:** Within two months before the end date of the Execution Agreement HSAC/BGF/PMO will submit to the FAO Representation in China a draft Terminal Report. The main purpose of the final report is to give guidance at ministerial or senior government level on the policy decisions required for the follow-up of the Project, and to provide the donor with information on how the funds were utilized. The terminal report is accordingly a concise account

of the main products, results, conclusions and recommendations of the Project, without unnecessary background, narrative or technical details. The target readership consists of persons who are not necessarily technical specialists but who need to understand the policy implications of technical findings and needs for insuring sustainability of project results. Work is assessed, lessons learned are summarized, and recommendations are expressed in terms of their application to the municipality's, country's as well as other regions' in China further development of natural reserve management and the conservation of biodiversity in the context of its development priorities as well as in practical execution terms. This report will specifically include the findings of the final evaluation as described in section 4.6 below. A final project review meeting should be held to discuss the draft terminal report before it is finalized by the HSAC/BGF/PMO and approved by the FAO LTO, LTU and the GEF Coordination Unit. (See instructions for Terminal Report in Execution Agreement Annex 4.F).

## 4.5.4 Monitoring and evaluation plan summary

Table 6 below provides a summary of the main M&E reports, responsible parties and timeframe.

**Table 6: Budgeted Monitoring and Evaluation Plan Summary** 

Type of M&E Activity	Responsible Parties	Time-frame	Budgeted costs
FT M&E Officer	HSAC/PMO	Continually	USD 84 900
Inception Workshop	HSAC/PMO, FAO Project Task Manager (PTM) supported by the FAO LTU, BH, and the GEF Coordination Unit	Within two months of project start up	USD 10 700
Project Inception Report	HSAC/PMO, FAO PTM cleared by FAO LTU, BH, and the GEF Coordination Unit	Immediately after workshop	-
Field based impact monitoring	HSAC/PMO, participating provincial bureaus and other relevant line agencies.	Continually	USD 3 400 (4 % of time of the Sr. Technical Advisor, technical workshops for identification of ecological quality indicators and M&E workshops)
Supervision visits and rating of progress in PPRs and PIRs	HSAC/PMO, FAO LTU and GEF Coordination Unit (TCI)	Annual or as required	The visits of the FAO LTU and the GEF Coordination Unit will be paid by GEF agency fee. The visits of the PM/PMO will be paid from the project travel budget
Project Progress Reports	HSAC/PMO, with inputs from other partners	Six-monthly	USD 2 600 (3% of the time of the PM)
Project Implementation Review report	FAO PTM and LTU supported by the HSAC/PMO and cleared and submitted by the GEF Coordination Unit (TCI) to the GEF Secretariat	Annual	Paid by GEF agency fee

Type of M&E Activity	Responsible Parties	Time-frame	Budgeted costs
Co-financing Reports	HSAC/PMO	Annual	USD 2 000 (1% of the time of the PM and 3% of the time of the reporting and contracts officer)
Technical reports	HSAC /PMO, FAO PTM/LTU	As appropriate	-
Mid-term Evaluation	External Consultant, FAO independent evaluation unit in consultation with the project team including the GEF Coordination Unit (TCI) and other partners	At mid-point of project implementation	USD 40 000 for external consultant and USD 11 300 for evaluation workshop. In addition the agency fee will pay for expenditures of FAO staff time and travel
Final evaluation	External Consultant, FAO independent evaluation unit in consultation with the project team including the GEF Coordination Unit (TCI) and other partners	At the end of project implementation	USD 40 000 for external consultants and USD 12 000 for evaluation workshop. In addition the agency fee will pay for expenditures of FAO staff time and travel
Terminal Report	HSAC/PMO, FAO PTM/LTU, TSCR report Unit	At least two month before end of project	-
Total Budget		¥ - J	USD 196 700

#### 4.6 PROVISION FOR EVALUATIONS

172. An independent Mid-Term Evaluation (MTE) will be undertaken towards the end of the third project year to review progress and effectiveness of implementation in terms of achieving project objective, outcomes and outputs. Findings and recommendations of this evaluation will be shared and discussed in a midterm evaluation workshop and will be instrumental for bringing improvement in the overall project design and execution strategy for the remaining period of the project's term if necessary. FAO will arrange for the MTE in consultation with project management. The evaluation will, *inter alia*:

- review the effectiveness, efficiency and timeliness of project implementation;
- analyze effectiveness of partnership arrangements;
- identify issues requiring decisions and remedial actions;
- propose any mid-course corrections and/or adjustments to the implementation strategy as necessary; and
- highlight technical achievements and lessons learned derived from project design, implementation and management.

An independent Final Evaluation (FE) will be carried out three months prior to the terminal review meeting of the project partners. The FE would aim to identify the project impacts and sustainability of project results and the degree of achievement of long-term results. This Evaluation would also have the purpose of indicating future actions needed to sustain project results, expand on the existing Project in subsequent phases, mainstream and up-scale its products and practices, and disseminate information to management authorities responsible for the management of other Chinese nature reserves to assure continuity of the processes initiated by the Project.

173. Some critical issues to be evaluated in the midterm and final evaluations will be: (i) the degree to which decision-makers have understood the new approach and concepts promoted by the Project and supported their application; (ii) the status of policy formulation and subsequent adoption by government; (iii) the process followed and quality of NR management plans supported under the Project; (iv) the degree to which the creation of CCS supported under the sustainable development component have actually facilitated local participation in NR planning and management processes; and (v) the effectiveness of the training programme in instilling new concepts in NR staff and other public agency decision-makers and technical staff.

174. The FAO Project Task Manager will prepare the first draft of the Terms of Reference for the mid-term and the final evaluations and consult with and incorporate comments from HSAC/PMO, the FAO budget holder, the FAO Lead Technical Unit and Officer, and the FAO GEF Coordination Unit. Subsequently the TORs will be sent to the FAO Office of Evaluation for finalization, in accordance with FAO evaluation procedures and taking into consideration evolving guidance from the GEF Evaluation Office. The TORs and the reports will be discussed with and commented upon by the project partners.

#### 4.7 COMMUNICATION OF PROJECT RESULTS AND VISIBILITY

175. Giving high visibility to the Project and ensuring effective communications in support of the project's message has been addressed in a number of activities that have been incorporated into its design. These include: (i) the creation of the BCC which will provide visibility of the Project among high-level sector decision-makers; (ii) outfitting of a "world class" interpretation centre supported with 80 km of trails posted with appropriate signage; (iii) several communication initiatives supported under sub-component 3.3 that incorporate different types of media and media events to promote the Project's "message"; and (iv) for the more distant community, including other stakeholders in China and beyond, the establishment of a project website and the support for five "best practices and lessons learned" publications to be prepared and disseminated under Component 4.

#### SECTION 5 – SUSTAINABILITY OF RESULTS

#### **5.1 SOCIAL SUSTAINABILITY**

176. In the short-term (i.e., 5 year life-of-project), direct socio-economic benefits are most directly linked with the sustainable development activities supported under sub-component 2.2). These consist of project support for proven production practices and technologies in response to local conditions characterizing the selected village identified during project preparation. The establishment of the CCC as a pre-requisite to receiving project support will ensure gender and social equity issues are addressed through the preparation of "contracts" between the PMO and village association. Where successful, these production practices and technologies will be promoted for adoption and replication elsewhere by relevant mainline agencies (e.g., Bureau of Fisheries and Agriculture) as well as by NR staff in other villages in proximity to their respective Reserve. Over the longer term it is expected that considerable economic benefits will be generated by the growth and diversification of eco-based tourism in Huangshan Municipality, with nature reserves as the core attraction, generating employment opportunities similar, albeit in less numbers, that occurred in the HNSR. The ecotourism pilot activity supported under the sustainable development component will prove valuable in generating relevant experiences for evaluating for possible up-scaling.

### 5.2 ENVIRONMENTAL SUSTAINABILITY

177. The project goal is to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The Project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of PAs. Progress achieved towards reaching the goal and meeting the objective at the end of the Project will be sustained primarily through: (i) leaving an enabling policy framework that will facilitate the continuation of the approach adopted by the Project; (ii) training a cadre of NR staff and other government technicians on the importance of and means to conserving biodiversity in Huangshan Municipality; (iii) increasing awareness in both decision-makers and the public at large of Huangshan biodiversity endowment including its role in supporting socio-economic development objectives through providing an attraction for increased visitation to the municipality and the role of nature reserves and other public agencies in promoting its conservation.

### 5.3 FINANCIAL AND ECONOMIC SUSTAINABILITY

178. GEF supported projects are rarely either financially or economically sustainable. Moreover, there exist few nature reserves in the world much less NR systems that are sustainable, particularly in the absence of including and charging for external "goods and services" provided for by many of these reserves. Even the Project's highly visited HNSR produces a deficit (see Table 1). Furthermore, at least in China, financial sustainability does not appear to be a significant risk as resources are growing for conservation of biodiversity in the Province and likely to do so for the foreseeable future. Nevertheless, the Project will support efforts to reduce some of the structural factors contributing to the deficits, cited above, primarily through the introduction of budget and revenue analyses in the preparation of management plans for the 6 priority NRs and likely policy support to facilitate reserves to generate and retain more of their own revenue. It is also expected that the approach supported

by the Project will result in strengthening of management in the reserves and contribute to an improved ability to use financial resources in a more effective manner for conservation objectives. Finally, establishing linkages between key institutional stakeholders through the BCC and becoming partners with local communities through the CCCs will provide a broader and firmer foundation to base the future management of the NRs and will likely lead to additional financing sources from other line agencies in support of economic development objectives in areas in proximity to participating nature reserves (e.g., roads and production schemes targeting rural villages).

### 5.4 SUSTAINABILITY OF CAPACITIES DEVELOPED

179. The Project has been designed as a multi-phase project beginning with six priority nature reserves to be strengthened through the introduction of new concepts in planning and management including promoting greater participation of local communities living in or adjacent to NRs. Supported by an enabling policy framework, that will build on the project's initial experiences and "lessons-learned", it is expected there will be a high demand to scale up to other nature reserves in the municipality. Moreover, the 5 year operational plans supported under sub-component 2.1 will be completed by the end of the Project and new draft 5 year operational plans will be supported before project closure to ensure the continued application of new concepts and approaches supported under the 1<sup>st</sup> phase project. Similarly, getting the policies "right" in support of the "mainstreaming" of biodiversity in other mainline agencies and sectors will ensure that demand will continue for those decision-makers and technical staff that have participated in the capacity development sub-component.

#### 5.5 APPROPRIATENESS OF TECHNOLOGY INTRODUCED

180. There is not much new technology being introduced through the project particularly that does not already exist in selected nature reserves in China, including HNSR. What is new is the approach to the planning and management of nature reserves in Huangshan Municipality which heretofore can best be described as "top-down" with little participation of other stakeholders. This has been described in more detail in Section 5.6 below.

### 5.6 REPLICABILITY AND SCALING UP

181. Project design is based on a replication and scaling up approach. With 73 nature reserves in Huangshan Municipality it is not possible that a single project can address all existing reserves equally. As a result, project design has taken a multi-Tier, multi-phase approach focusing most project resources on the six priority NRs and including an additional six that will participate through the NR network component. The remaining 61 reserves will participate through the capacity building component. New approaches to planning and management of nature reserves applied in the 6 priority NRs will be introduced during the training activities with the intention that these will be adopted in a subsequent phase once there has been time to analyze the experiences and lessons-learned from the initial six NRs. The policy, planning and institutional arrangements component (Component 1) is designed to create an enabling environment to promote post-project replication and scaling up, not only in Huangshan but in other Chinese NRs, the latter promoted through dissemination of project experiences and lessons learned from the 5 best practices publications supported under the information dissemination sub-component.

# **APPENDICES**

# **APPENDIX 1: RESULTS MATRIX**

Project outcomes and impacts: 11

Objective/Impact	Indicator	Baseline value of Indicator	Target Value of Indicator	Means of Verification	Assumptions
Global Environmental Objective: The goal of the proposed project is to secure the effective conservation and sustainable use of the biodiversity in the	Outcome 1.1: Number of large scale plans that incorporate biodiversity as a planning priority	Component 1: Biodiversity not described as a planning priority in Municipal 12 <sup>th</sup> 5 Year Social and Economic Development Plan	Component 1: Biodiversity conservation identified as a priority in the Municipal 13 <sup>th</sup> 5 Year Social and Economic Development Plan.	Municipal 13 <sup>th</sup> 5 Year Social and Economic Development Plan	Component 1: - Government does not adopt radically different policy stance on environment
mountainous forest ecosystems of Huangshan Municipality.	Outcome 2.1a: BD TT score for management efficiency of NRs	Component 2: Average management efficiency in 12 project supported NRs included in the municipal network of protected areas (measured by using the BD O1 TT) is 50.	Component 2: Average management efficiency in 12 project supported nature reserves included in the municipal network of protected areas increased by 22% (measured by using the BD O1 TT) is 65.	METT scorecards; site visits	Component 2:  - Co-financing commitments are completed.  - No changes in staff personnel policy in the municipal NRs  - NRs staff numbers not affected by need to address priorities elsewhere (e.g., new policy priorities in forestry sector);
	# of hectares of PA for which management efficiency is increased.	0	Increased management efficiency across 67,496 ha (direct impact – Tiers 1,2,3).  Indirect: 35,504 ha  Total: 103,000 ha.	METT Scorecards/ site visits	Without project intervention, protected areas will not improve their management effectiveness, particularly with respect to biodiversity conservation.
	Number of hectares of productive landscape into which biodiversity conservation practices and objectives are	0	46,614 ha agriculture/forest land 3,800 ha forest land (corridor). Total: 50,414 ha.	Forestry master plan; Municipal bureau of agriculture plan.	Biodiversity conservation committee will be successful in its work to develop and implement mainstreaming plan and that this ecological work

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<sup>&</sup>lt;sup>11</sup> Please insert/delete rows for components as needed

n	mainstreamed				will continue to be a priority in China.
W Co	Number of sectors into which biodiversity conservation objectives are mainstreamed.	0	3 Direct (Forestry, Ecotourism, Agriculture) 3 Indirect (fisheries, water, transport)	Plans produced by the project: Biodiversity Conservation Plan; Ecotourism & Forestry Master Plan	Plans will be implemented by responsible agencies with the help of the Biodiversity Conservation Committee.
II b ir a	Outcome 2.1b: Improvement in piodiversity species indicators: a) Population of <i>Paa</i> spinosa	Population numbers of <i>Paa spinosa</i> (amphibian) found in 1,000 meter transects in streams located in proximity to villages in 6 project supported reserves is 17.	Population numbers of Paa spinosa (amphibian) found in 1,000 meter transects in streams located in proximity to villages in 6 project supported reserves is 26.	Field studies	
sı	b) Number of bamboo species in Qingliangfeng NR.	Forty bamboo species found in Qingliangfeng NR	No change. Forty species recorded at end of project.	Field studies	
Y p	c) Numbers of Chinese Yew ( <i>Taxus spp.</i> ) in 6 project supported NRs (tier 1 and tier 2 project supported NRs)	Baseline and targets to be established in 1 <sup>st</sup> semester of project implementation)	Population of Yew to be maintained over life of project.	Field study	Natural disasters don't affect ecological health and species numbers in project supported NRs.
p (A)	d) Populations of four plant indicator species (Rhododendron maculiferum, Enkianthus chiensis, Baeothryon subcapitatum and Carex brevicuspis) in proximity to tourism visitation infrastructure in 4 project supported reserves (Huangshan NSR, Jiulongfeng PNR, Tianhushan PNR and Lingnan PNR)	Baseline and targets to be established in 1 <sup>st</sup> semester of project implementation)	Populations of four species to be maintained over life of project.	Field studies	

		Component 3:	Component 3:		Component 3:
	Outcome 3.1: Number of	-	10 primary and 10 secondary		- Municipal school policies
	schools that mainstream	Baseline Value: Zero	schools "mainstream" pilot		don't change from current
	biodiversity modules into		supported biodiversity		emphasis of importance of
	their curricula		modules in their respective		providing teaching on
			curricula.		environmental matters;
	Outcome 3.2: Number of		2 economic sector		- Participating sector agencies
	economic sector	Mainline agency sector plans			don't adopt policies opposing
	development plans that	don't presently reflect	incorporate biodiversity		the adoption of project-
	mainstream biodiversity	biodiversity considerations.	considerations in their		supported policies favoring
			respective 5 year, 13th year		biodiversity conservation;
	Outcome 3.3: Number of	8,000 visits to 5 project	plans		- Change in political leadership
	visits to Huangshan NRs	supported Huangshan NRs	Visitation increases to 80,000		resulting in delays in new
			visits to 5 project supported		policy formulation;
			Huangshan NRs		- Economy continues to grow
					and favors tourism visitation in
					Huangshan Municipality.
FAO Development	Number of communities	1 of 5 target communities	All five target communities	Survey of community	Eco-tourism will continue to
Objective: 12 To increase	and households benefiting	benefits from tourism.	benefit.	members identifies	grow in popularity in China.
and improve the provision	from improved and			main sources of	
of goods and services from	increased services from			income at project	
high-value mountain forest	protected areas with			inception, project	
ecosystems in a sustainable	particular emphasis on			mid-term and project	
manner.	sustainable tourism.			end.	

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<sup>&</sup>lt;sup>12</sup> In line with FAO SO2

Project outputs and outcomes:<sup>13</sup>

	Baseline <sup>14</sup>	Target	Milestones towards achieving output and outcome targets					Data Collection and Reporting			
Indicators			Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Respons ible for Data Collecti on		
Component 1: Policy, Planning & Institutional Arrangements  Outcome 1.1: An integrated approach to the conservation and management of forest biodiversity supported by a coherent policy, planning and institutional framework in Huangshan Municipality.											
Outcome 1.1: Number of large scale economic development plans that identify biodiversity as a priority.	Baseline value: zero (2013)	Target value: 1.	-	-	50 % Outline of 13 <sup>th</sup> 5 year plan and sector agencies consulted	100 % Sector plans prepared and 13 <sup>th</sup> 5 year plan finalized	100 %	13th 5 Year Plan Municipal 12 <sup>th</sup> 5 Year Social and Economic Development Plan	PMO (M&E officer)		
Output 1.1.1. Policies adopted for: (i) the conservation of biodiversity, (ii) establishment of a municipal NR system and (iii) management of alien species in Huangshan municipality.	There exist national policies for NR and alien species but no provincial or local policies.	3 policies	0	3	3	3	3	Government decrees	PMO (M&E officer)		
Output 1.1.2. Two draft policies addressing specific biodiversity conservation issues.	Absence of local, provincial policies on PA financing Wildlife damage	2 draft policies	10 % Preparation of analytical framework to "capture" potential policy issue	20 % Identification of policy issues.	50 % Preparation of TOR and contracting of qualifying institutions	100 % Policies and studies supported by workshops resulting and two recommendations and formulation	100 %	Draft policy recommendati ons	PMO (M&E officer)		

Please insert/delete columns for project years and rows for outputs and outcomes as needed.

Value in the case of quantitative indicators and description of situation in the case of qualitative indicators. Please insert the year of the baseline

			N	Ailestones towards ach	ieving output and o	utcome targets		Data Collecti Reporti	
Indicators	Baseline <sup>14</sup>	Target	Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Respons ible for Data Collecti on
	compensation					of draft policies			
Output 1.1.3. Three long-term plans to guide the implementation of the two project supported policies (i and ii of Output 1.1.1) and a municipal forest ecotourism master plan developed and under initial implementation.	Contract has been awarded to Anhui University to formulate forest ecotourism master plan.	3 long-term plans	-	3	3	3	3	Three completed plans	PMO (M&E Officer)
Output 1.1.4. A permanent Biodiversity Conservation Committee (BCC-policy) functioning with regular meetings.	No policy committee exists	1 policy committee	1	1	1	1	1	Government circular reporting creation of the Committee	PMO (M&E Officer)
Output 1.1.5. A permanent Biodiversity Advisory Committee (technical) functioning and providing technical support to the BCC.	No technical advisory exists	1 technical committee	1	1	1	1	1	Government circular reporting creation of the Committee	PMO (M&E Officer)
<b>Component 2: Improved</b>									
Outcome 2.1: An increase improving the status of bid		gement efficiency i	n 6 project supported	d nature reserves includ	ed in the municipal no	etwork of protected a	areas		
Outcome 2.1a: BD TT score for management efficiency of NRs	Average management efficiency in 12 project supported NRs included in the	Average management efficiency in 12 project supported nature reserves			Increased by 10%		Increased by 22%	METT scorecards; site visits	PMO (M&E)

		M	lilestones towards ach	nieving output and ou	tcome targets		Data Collecti Reporti	
Baseline <sup>14</sup>	Target	Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Respons ible for Data Collecti on
etwork of rotected areas measured by sing the BD 01 TT) is 50.	included in the municipal network of protected areas increased by 22% (measured by using the BD O1 TT) is 65.  Population number is 26			Population numbers of <i>Paa spinosa</i> (amphibian) found in 1,000 meter transects in streams located in proximity to villages in 6 project supported reserves is 21		Populatio n numbers of Paa spinosa (amphibia n) found in 1,000 meter transects in streams located in proximity to villages in 6 project supported reserves is	Field studies	Researc h service provider ; PMO (M&E)
ni e r r r s ) :	unicipal twork of otected areas neasured by ing the BD I TT) is 50.  opulation mbers of na spinosa und in 1,000 neter transects streams cated in oximity to llages in 6 oject pported	included in the municipal network of protected areas increased by ing the BD at TT) is 50.  In the state of protected areas increased by 22% (measured by using the BD O1 TT) is 65.  In the state of protected areas increased by 22% (measured by using the BD O1 TT) is 65.  In the state of protected areas increased by 22% (measured by using the BD O1 TT) is 65.  In the state of protected areas increased by 22% (measured by using the BD O1 TT) is 65.  In the state of protected areas increased by 22% (measured by using the BD O1 TT) is 65.  In the state of protected areas increased by 22% (measured by using the BD O1 TT) is 65.  In the state of protected areas increased by 22% (measured by using the BD O1 TT) is 65.  In the state of protected areas increased by 22% (measured by using the BD O1 TT) is 65.  In the state of protected areas increased by 22% (measured by using the BD O1 TT) is 65.  In the state of protected areas increased by 22% (measured by using the BD O1 TT) is 65.  In the state of protected areas increased by 22% (measured by using the BD O1 TT) is 65.  In the state of protected areas increased by using the BD O1 TT) is 65.  In the state of protected areas increased by using the BD O1 TT) is 65.  In the state of protected areas increased by using the BD O1 TT) is 65.  In the state of protected areas increased by using the BD O1 TT) is 65.	Baseline <sup>14</sup> Unicipal twork of otected areas neasured by ing the BD increased by 22% (measured by using the BD O1 TT) is 65.  Population mbers of the aspinosa and in 1,000 eter transects streams cated in oximity to a lages in 6 oject pported  Target  Year 1  Year 1	Baseline <sup>14</sup> Target  Year 1  Year 2  Unicipal twork of of otected areas network of protected areas increased by ing the BD of TT) is 50.  Population mbers of the a spinosa and in 1,000 eter transects streams cated in oximity to llages in 6 oject pported  Target  Year 1  Year 2  Year 2	Baseline 14  Target  Year 1  Year 2  Year 3  Included in the municipal network of orotected areas increased by ing the BD of TT) is 50.  Opulation mbers of at a spinosa and in 1,000 eter transects streams cated in oximity to lages in 6 oject opported  Target  Year 1  Year 2  Year 3  Year 3  Year 3  Year 3  Year 3  Population number of protected areas increased by 22% (measured by using the BD O1 TT) is 65.  Population numbers of Paa spinosa (amphibian) found in 1,000 meter transects in streams located in proximity to villages in 6 oject opported	Year 1  Year 2  Year 3  Year 4  Year 2  Year 3  Year 4  Year 2  Year 3  Year 4  Year 3  Year 4  Year 2  Year 3  Year 4  Year 4  Year 2  Year 3  Year 4  Year 4  Year 3  Year 4  Year 3  Year 4  Year 3  Year 4  Year 3  Year 4  Year 4  Year 4  Year 2  Year 3  Year 4  Year 4	Baseline 14  Target  Year 1  Year 2  Year 3  Year 4  Year 5  Included in the municipal network of protected areas increased by 22% (measured by using the BD OI TT) is 65.  Population mbers of as spinosa unid in 1,000 meter transects streams cated in oximity to lalages in 6 oject pported serves is 17.  Baseline 14  Year 1  Year 2  Year 3  Year 4  Year 5  Year 3  Year 4  Year 5  Population number of Paa spinosa (amphibian) found in 1,000 meter transects in streams located in proximity to villages in 6 oject project supported serves is 17.	Baseline 14  Target  Year 1  Year 2  Year 3  Year 4  Year 5  Means of verification  Population numbers of paa spinosa und in 1,000 meter transects streams cated in oximity to lalages in 6 oject proported serves is 17.  Means of verification  Population numbers of Paa spinosa (amphibian) found in 1,000 meter transects in streams located in proximity to villages in 6 project supported serves is 17.

			N	Ailestones towards ach	nieving output and ou	itcome targets		Data Collect Reporti	
Indicators	Baseline <sup>14</sup>	Target	Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Respons ible for Data Collecti on
ii) Number of bamboo species in Qingliangfeng NR.	Forty bamboo species found in Qingliangfeng NR	Forty species recorded at end of project.			Forty bamboo species		Forty bamboo species	Field studies	Researc h service provider ; PMO (M&E)
iii) Numbers of Chinese Yew ( <i>Taxus spp.</i> ) in 6 project supported NRs (tier 1 and tier 2 project supported NRs)	Baseline and targets to be established in 1st semester of project)	Population of Yew to be maintained over life of project.			Same as baseline		Same as baseline	Field studies	Researc h service provider ; PMO (M&E)
iv) Populations of four plant indicator species (Rhododendron maculiferum, Enkianthus chiensis, Baeothryon subcapitatum and Carex brevicuspis) in proximity to tourism visitation infrastructure in 4 project supported reserves (Huangshan NSR, Jiulongfeng PNR, Tianhushan PNR and Lingnan PNR)	Baseline and targets to be established in 1st semester of project implementation)	Populations of four species to be maintained over life of project.			Same as baseline		Same as baseline	Field studies	Researc h service provider ; PMO (M&E)
Output 2.1.1 Sector plan promoting the integration of	Master plan exists but it does not reflect	One biodiversity conservation	30 % Preparation of TORs and	100 % Service provider coordinates	100 %	100 %	100 %	Sector plan	PMO (M&E Officer

			I	Milestones towards ach	nieving output and	outcome targets		Data Collecti Reporti	
Indicators	Baseline <sup>14</sup>	Target	Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Respons ible for Data Collecti on
biodiversity conservation as management objective integrated into Huangshan NSR master management plan developed and under initial implementation.	biodiversity conservation as a management objective.	sector plan	contracting of qualifying institutions	participatory workshops, formulation of plan followed by approval by municipal government.					
Output 2.1.2. Management plans (2) and framework plans (3) for the remaining 5 project supported NRs developed and under initial implementation.	2 provincial level management plans exist.	2 management plans and 3 framework plans	-	5	5	5	5	Management plans	PMO (M&E Officer)
Output 2.1.3.a. Six local community comanagement committees (CCCs) to assist NR staff in conserving local biodiversity resources.	No CCC exist	6 CCCs	6	6	6	6	6	Township circulars	PMO (M&E Officer)
Output 2.1.3.b. Number of people benefitting from sustainable production activities in target villages.	0	4,000	500	1000	1500	2000		Field visits; project records; local reports.	PMO (M&E Officer)
Output 2.1.4. Computer- based NR Network for Huangshan NRs	None exists at present	1 network	70 % Preparation of TORs and contracting of qualifying	100 % Creation of the network in 12 national (3) and provincial (8) and	100 %	100 %	100 %	Geo-referenced data products; site visits	PMO (M&E officer); supervis ion

			M	ilestones towards achi	eving output and ou	itcome targets		Data Collect Reporti	
Indicators	Baseline <sup>14</sup>	Target	Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Respons ible for Data Collecti on
			institutions for network design and purchase of equipment	county (1) nature reserves					mission s.
Output 2.1.5. 3,800 ha of landscape supporting Biodiversity Conservation by insuring forest ecosystem connectivity between three NRs.	No biodiversity friendly landscapes connecting NRs exist in Huangshan Municipality	1 corridor (3,800 ha)	contracting of qualifying institutions for study in change	100 % Contract awarded and implemented resulting in recommendations and change in land use status	100 %	100 %	100 %	County level decree announcing change in land use; site visits	PMO (M&E officer); supervis ion mission s.
Output 2.1.6. Competitive applied research grant program to support science-based management decision-making in project supported NRs	Ad hoc research with little relevance to better management decision- making for biodiversity conservation	24 research grants	-	2	8	16	24	Research reports and scientific publications	PMO (M&E officer); supervis ion mission s.
Output 2.1.7. Integrated monitoring program among project supported NRs operating and baseline established.	Only ad hoc, species specific monitoring done on a time limit basis.	1 integrated monitoring program	50 % Preparation of TORs and contracting of qualifying institutions, design the monitoring program, purchase equipment/limited deployment	80 % Construction of monitoring station deployment of additional equipment and basic monitoring continues.	100 % Construction of monitoring station completed and remaining equipment deployed and operationalized	100 %	100 %	monitoring reports, site visits, annual and final reports and publications	PMO (M&E officer); supervis ion mission s

			M	ilestones towards ach	ieving output and ou	itcome targets		Data Collect Reporti	
Indicators	Baseline <sup>14</sup>	Target	Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Respons ible for Data Collecti on
<b>Component 3: Capacity</b>									
Outcome 3.1: Increased in			olitical support for the	conservation of biodi	versity in China's fore	est ecosystems.			
Outcome 3.1: Number of schools that mainstream biodiversity modules into their curricula	Public education curricula don't formally reflect biodiversity related information Mainline	Biodiversity modules Mainstreamed in 10 primary and 10 secondary school curricula.	-	-	-	-	10 primary and 10 secondary mainstrea m pilot supported biodiversi	Local school curricula	PMO (M&E officer)
Outcome 3.2: Number of economic sector development plans that mainstream biodiversity  Outcome 3.3: Number of visits to Huangshan	agency sector plans don't presently reflect biodiversity considerations 8,000 visits to Huangshan NRs	Biodiversity considerations incorporated in 2 economic sector development plans. Visits in 5 project	-	-	2 sectors incorporate biodiversity considerations in their respective 5 year,13 <sup>th</sup> year plans	2 sectors incorporate biodiversity considerations in their respective 5 year,13 <sup>th</sup> year plans	ty modules  2 sectors incorporat e biodiversi ty	Sector plans	PMO (M&E officer)
NRs	(excluding HNSR)	supported NRs increased to 80,000		-	-	-	considerat ions in their respective 5 year,13 <sup>th</sup> year plans 80,000 visits to	NR visitation logs.	NR staff/P MO
							Huangsha n NRs		171.50
Output 3.1.1. Master	No plan exists	1 training plan	1	1	1	1	1	Training plan	PMO

			Mi	ilestones towards achie	eving output and ou	itcome targets		Data Collect Reporti	
Indicators	Baseline <sup>14</sup>	Target	Year 1	Year 2	Year 3	Year 4	Year 5	Means of verification	Respons ible for Data Collecti on
training plan.									(M&E officer)
Output 3.1.2. 600 NR staff, 280 government official and 120 community leaders trained.	No systematic training exists.	Training of 600 NR staff, 280 government officials and 120 community leaders	-	150 NR staff 70 government officials 30 community leaders	300 NR staff 140 government officials 60 community leaders	450 NR staff, 210 government officials 90 community leaders	600 NR staff  280 governme nt officials 120 communit y leaders	attendance records, certificates of training awarded; training curricula	PMO (M&E officer)
Output 3.2.1. Project public education plan.	No plan	1 public education plan	1	1	1	1	1	public education plan	PMO (M&E officer)
Output 3.2.2. Biodiversity-based curricula applied in pilot primary (1) and secondary (1) schools.	Curricula don't currently exist	1 primary and 1 secondary school curricula	1	1	1	1	1	Curricula	PMO (M&E officer)
Output 3.2.3. Annual primary and secondary school readers compiling biodiversity related material for Huangshan school system.	School readers don't currently exist	1 primary and 1 secondary school reader	-	1 (primary) 1 (secondary)	2 (primary) 2 (secondary	3 (primary) 3 (secondary	4 (primary) 4 (secondar y	Readers	PMO (M&E officer)
Output 3.3.1. "World class" biodiversity interpretation centre in Huangshan National Scenic Reserve.	1,200 mt <sup>2</sup> biodiversity interpretative infrastructure exists but with	1 centre	20 % Preparation of TORs and contracting of qualifying	100 % Design of interpretation plan, purchase of equipment, initiate	100 %	100 %	100 %	site visit	Supervi sion mission

			I	Milestones towards	s achie	eving output a	ınd ou	itcome target	ts		Data Collect Reporti	
Indicators	Baseline <sup>14</sup>	Target	Year 1	Year 2		Year 3		Year 4		Year 5	Means of verification	Respons ible for Data Collecti on
	no content		consultant	training interpretative s	taff							
Output 3.3.2. 80 km of trails in HNSR posted with biodiversity conservation interpretive materials.	80 km of trails exist but with technically out- dated and degraded interpretive materials	80 km of trails posted with updated signage in support of biodiversity information	20	80		80		80		80	site visit	Supervi sion mission
			Milestones towar	ds achieving outpu	ıt and	outcome targ	gets				Data Collection Reporting	and
Indicators	Baseline	Target	Year 1	Year 2		r 3	Year	r 4	Yeai	· 5	Means of verification	Respons ible for Data Collectio n
Component 4: Informati			are being taken un s	and renlicated elsew	here i	n the non-parti	icinati	no NRs				
Outcome 4.1: Number of Tier 3 and 4 NRs adopting new approaches generated by the project	Huangshan's tier 3 and 4 NRs have no CCCs, comanagement plans and/or participation in network	Five (5) Tier-3 and/or Tier-4 NRs adopt one or more of the new approaches generated by the project during life of project.	-	and replicated elsewhere		п ше поп-раго	1	iig ivits.	5		site visits	PMO confirme d with supervisi on missions
Output 4.1.1. Project webpage.	No webpage currently exists	1 webpage	1	1	1		1		1		Visit webpage; webpage hits	PMO (M&E officer)
Output 4.1.2.	No "best-	5 "best	-	-	-		-		5		publications	PMO

			ľ	Milestones towards	s achi	eving output a	nd o	utcome targets	3		Data Collect Reporti	
Indicators	Baseline <sup>14</sup>	Target	Year 1	Year 2		Year 3		Year 4		Year 5	Means of verification	Respons ible for Data Collecti on
Publication of project- related "best-practices" in biodiversity conservation.	practices" exist at present	practice" publications										(M&E officer)
Output 4.1.3. Peer-to peer consultative workshops for NR staff.	No peer-to- peer approaches used	5 peer-to-peer consultative workshops for NR staff	-	1	2		3		5		workshop reports and participant logs	PMO (M&E officer)
Output 4.1.4. Project monitoring system providing six-monthly reports on progress in achieving project outputs and outcomes		1 system and 10 progress reports	2	2	2		2		2		Project Progress Report	PMO (M&E officer)
Output 4.1.5. Midterm and final evaluations carried out and reports disseminated.	No evaluations exist at present	2 evaluation reports	-	-	1		1		2		Evaluation reports	PMO (M&E officer)

# APPENDIX 2: WORK PLAN (RESULTS BASED)

		Responsible institution/		Yea	ar 1			Yea	ar 2			Ye	ar 3			Yea	ar 4			Yea	ar 5	
Output	Activities	entity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Component 1: Policy, Planning & Institutional Arrangements																						
Output 1.1.1. Three implementing guidelines (policies) for: (i) the conservation of biodiversity, (ii)	Preparation of TOR for national consultants	PMO			•																	
establishment of a municipal NR system and (iii) management of alien species in	2. Recruitment of National Consultant	PMO			•																	
Huangshan municipality.	3. Studies and workshops on baseline conditions and possible policy options					•	•															
	4. Draft report	National Consultants						•														
	5. Review, finalization, and approval of the policies	Legal Office of the Municipal Government							•	•												
Output 1.1.2. Two draft policies addressing specific biodiversity conservation issues TBD during project implementation.	Issues identified by the relevant consultants and stakeholders during project implementation	PMO				•	•	•	•	•	•	•	•	•	•							
	2. Preparation of TOR and securing services of qualified institutions to assess policy options												•									
	3. Studies and workshops to analyze problems and come up with recommendations	Service- provider												•	•	•						
	4. Report recommending draft policies	Service- provider															•					
Output 1.1.3. Three long-term plans to guide the implementation of the two project supported policies (Output 1.1.1)	Preparation of TOR and securing services of qualified institutions						•															
and the development of ecotourism in Huangshan Municipality.	2. Studies and workshops to analyze problems and come up with recommendations	Service- provider						•	•													

		Responsible		Yea	ar 1			Yea	ar 2			Yea	ar 3			Yea	ar 4			Yea	ar 5	
Output	Activities	institution/ entity	Q1	Q2	Q3	Q4																
	3. Drafting of plans	Service- provider								•												
	4. Review, finalization and approval of the plans	PMO/ Municipal Planning Office								•												
Output 1.1.4. A permanent Biodiversity Committee (policy).	1. Defining TORs for the committee	PMO		•																		
	2. Selection of committee members and creation of the committee (government circular reporting the creation)	Municipal Government Executive		•																		
Output .1.1.5. A permanent Biodiversity Advisory Committee (technical).	Formulation of committee bylaws	Biodiversity Committee			•																	
	2. Submission for government approval	Municipal Government Science and Technical Office				•																
	3. Designing, organization, arrangement of research activities	BD Conservation and Research Centre					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	4. Monitoring, supervising and reporting	BD Conservation and Research Centre					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Component 2: Improved NR Management Effectiveness & Networks																						
Output 2.2.1. Revised Huangshan NSR management plan with biodiversity	TORs	PMO				•																
incorporated as management objective.	<ol> <li>Securing services of qualified institutions</li> <li>Studies and</li> </ol>	PMO Service-				•																
	<ul><li>3. Studies and workshops</li><li>4. Drafting sector</li></ul>	provider Service-					•	•														
	plan 5. Review, finalization, and approval of the plan	provider HSAC							•	•												

		Responsible		Yea	ar 1			Yea	ar 2			Ye	ar 3			Ye	ar 4			Yea	ar 5	
Output	Activities	institution/ entity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Output 2.1.2. Management plans (2) and framework plans (3) for the remaining 5 project supported NRs.	Formulation of TORs for the national consultants	PMO					•															
	2. Securing the national consultants	PMO					•															
	3. Studies and workshops	National consultants						•														
	4. Drafting reports	National constants							•													
	5. Review, finalization, and approval of the plan	Municipal BOF and Relevant Nature Reserves								•												
Output 2.1.3. Six local community comanagement committees (CCCs) to assist biodiversity conservation.	Formulation of TORs for consultants and securing consultants	PMO			•																	
	2. Setup of CCCs	Village participants with NR support			•																	
	3. Training and other co-management activities and co-management meetings	PMO/consulta nts/NR staff				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	4. Reporting	Consultants								•				•				•				•
Output 2.1.4. Computer-based NR Network for Huangshan NRs.	TORs for network design consultants and consultant recruitment	PMO			•																	
	2. NR network design	Consultant			•	•																
	3. Procurement of network equipment	Consultant				•																
	4. NR network implementation	Consultant					•	•	•	•												
Output 2.1.5. Creating Landscapes to Support Biodiversity Conservation.	TORs and contracting qualified service-provider	PMO				•																
	2. Studies and workshops	Service- provider					•	•														
	3. Drafting reports	Service- provider							•													

		Responsible		Yea	ar 1			Yea	ar 2			Ye	ar 3			Yea	ar 4			Yea	ır 5	
Output	Activities	institution/ entity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	4. Review, finalization, and approval of the reports									•												
	5. Formal creation of the biodiversity landscape	Municipal BOF								•												
Output 2.1.6. Competitive applied research grant program to support science-based management decision-making in project supported NRs.	Biodiversity     Advisory Committee     consulted on research     priorities and grant     mechanism.	PMO and biodiversity research consultant				•																
	2. Selection of research activities to support biodiversity conservation and NR management	BD Conservation Research Centre					•	•	•	•	•	•	•	•	•	•	•	•				
	3. Review of the proposed research proposals	ibid					•	•	•	•	•	•	•	•	•	•	•	•				
	4. Implementation of the research proposals	ibid								•	•	•	•	•	•	•	•	•	•	•	•	•
	5. Monitoring, supervision, evaluation and reporting	ibid									•	•	•	•	•	•	•	•	•	•	•	•
Output 2.1.7. Integrated monitoring program among project supported NRs.	TORs and securing of qualified service-providers	РМО			•	•																
	2. Formulation of monitoring stations plans and plan review	Service- provider				•	•															
	3. Purchase of equipment and construction of research station construction	PMU and service- provider					•	•	•	•	•	•	•	•								
	4. Monitoring and data collection	Service- provider				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	5. Annual work report and evaluation	Service- provider and PMO								•				•				•				
	6. Final report and review, and publication	Service- provider and PMO																			•	•
<b>Component 3: Capacity Building,</b>																						

		Responsible		Ye	ar 1			Yea	ar 2			Yea	ar 3			Ye	ar 4			Yea	ar 5	
Output	Activities	institution/ entity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Environmental Education and																						
Public Awareness																						
Output 3.1.1. Master training plan.	1. TORs for international consultants	PMO		•																		
	2. Recruitment of consultants			•																		
	3. Studies and workshops	PMO and International consultant		•	•																	
	4. Training plan drafting	International consultant			•	•																
	5. Review and finalization of training plan	PMO			•	•																
Output 3.1.2. 600 NR staff, 280 government official and 120	1. Recruitment of trainers	PMO								•												
community leaders trained	2. Training of trainers	PMO								•	•											
	3. Trainings, workshops, cross-visits	Training Specialists and Consultants					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Output 3.1.3. Project public education plan.	1. TORs of public education specialist	PMO		•																		
	2. Recruitment of education specialist	PMO			•																	
	3. Plan drafting and finalization	Public education specialist				•																
Output 3.1.4. Biodiversity-based curricula in pilot primary (1) and	TORs of curricula development specialist	PMO				•																
secondary (1) schools	2. Recruitment of the specialist	PMO				•																
	3. Curricula development	Curricula development specialist				•																
	4. Curricula review	Municipal Commission of Education				•																
	5. Selection of pilot schools (1 primary, 1 secondary)	PMO and Municipal Commission of Education				•																

		Responsible		Yea	ar 1			Yea	ar 2			Ye	ar 3			Yea	ar 4			Yea	ar 5	
Output	Activities	institution/ entity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	6. Training of teachers	Curricula development specialist				•	•				•				•				•			
	7. Implementation of curricula	Participating schools,																				
Output 3.1.5. Primary and secondary school readers compiling biodiversity	TORs of reader compiling specialist	PMO				•																
related material for Huangshan school	2. Recruitment of specialist	PMO				•																
system	3. Preparation of readers	consultant					•	•														
	4. Review and evaluation	Municipal Commission of Education						•	•													
	5. Finalization and distribution of readers	School authorities and Municipal Commission of Education								•				•				•				•
	6. Annual updating of readers	Consultant								•				•				•				•
Output 3.1.6. "World class" biodiversity interpretation centre in	1. TORs for interpretation consultant	PMO				•																
Huangshan National Scenic Reserve.	2. Recruitment of consultant	PMO					•	•														
	3. Formulation of interpretation plan design	International consultant						•	•													
	4. Procurement of equipment	PMO							•	•	•											
	5. Fitting out of the Interpretation Centre	HSAC									•	•										
	6. Training of interpreters	International Consultants											•									
Output 3.1.7. 80 km of trails in HNSR posted with biodiversity conservation interpretive material	Designing of interpretative material for the billboards	HSAC Planning Office				•	•															
morproduce material	2. Construction of billboards	Contractors						•	•	•												
	3. Installation of the billboards	Contractors								•	•	•										
Component 4: Information Dissemination and M&E																						

		Responsible institution/		Yea	ar 1			Yea	ar 2			Yea	ar 3			Yea	ar 4			Yea	ar 5	
Output	Activities	entity	Q1	Q2	Q3	Q4																
Output 4.1.1. Project webpage.	1. Webpage design	PMO and consultant				•																
	2. Webpage development	Webpage specialist				•	•	•														
	3. Operationalization of webpage	Webpage specialist						•														
Output 4.1.2. Project-related "best-practices" in biodiversity conservation.	Selection and evaluation of "best-practices"	PMO																				
	2. Printing of the "best-practices" reports																		•			
	3. Dissemination of the "best-practices"	PMO																		•	•	
Output 4.1.3. Peer-to-peer consultative workshops for NR staff	,	PMO								•				•				•	•			•
Output 4.1.4. Project monitoring system providing six-monthly reports on	monitorina avatom		•																			
progress in achieving project outputs and outcomes	2. Prepare project progress report				•		•		•		•		•		•		•		•		•	
Output 4.1.5. Midterm and final evaluations carried out and reports	Midterm evaluation	External Consultant											•									
disseminated.	Report dissemination	PMO												•								
	Final evaluation	External Consultant																			•	
	Report dissemination	PMO																				•
Project Management			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

# **APPENDIX 3: RESULTS BUDGET**



For detailed Excel version showing budget per output, please click on icon Excel 97-2003 Works

	Type of	No. of	Unit	Comp. 1:	Comp.2:	Comp. 3:	Comp. 4:	PM	GEF	Year 1	Year 2	Year 3	Year4	Year 5
Oracle code and description	Unit	units	cost	Total	Total	Total	Total							
5570 International Consultants														
1. NR planner	month	3	12,500	0	37,500	0	0		37,500	13,500	12,000	12,000		
2. Rural Sociologist	month	2	12,500	0	25,000	0	0		25,000	12,500	12,500			
3. Ecosystem Monitoring expert	month	2	12,500	0	25,000	0	0		25,000	12,500	12,500			
4. NR training consultant	month	3	12,500	0	0	37,500	0		37,500	13,500	12,000	12,000		
5. NR interpretation expert	month	2	12,500	0	0	25,000	0		25,000	12,500	12,500			
Sub-total international Consultants				0	87,500	62,500	0	0	150,000	64,500	61,500	24,000	0	0
National consultants														
6. Sr. Technical NR Specialist (CTA)	month	60	1,420	2,840	8,520	2,840	0	71,000	85,200	17,040	17,040	17,040	17,040	17,040
7. M&E Specialist	month	60	1,415	0	0	0	84,900		84,900	16,980	16,980	16,980	16,980	16,980
8. Biodiversity policy consultant	month	4	4,000	16,000	0	0	0		16,000	8,000	8,000			
9. NR system policy consultant	month	4	4,000	16,000	0	0	0		16,000	8,000	8,000			
10. Alien species policy consultant	month	4	4,000	16,000	0	0	0		16,000	8,000	8,000			
11. NR planner	month	2.5	4,000	0	10,000	0	0		10,000		10,000			
12. Biodiversity conservation planner	month	4	4,000	0	16,000	0	0		16,000		16,000			
13. Ecotourism planner	month	5.5	4,000	22,000	0	0	0		22,000		11,000	11,000		

14. Management plan specialist (Huangshan)	month	4	4,000	0	16,000	0	0		16,000		16,000			
15. Management plan specialist (5 of 6 NRs)	month	5	4,000	0	20,000	0	0		20,000		20,000			
16. Operational plan (Huangshan)	month	4	4,000	0	16,000	0	0		16,000		16,000			
17. Operational plan specialists (5 of 6 NRs)	month	5	4,000	0	20,000	0	0		20,000		20,000			
18. Co-management specialist	month	8	4,000	0	32,000	0	0		32,000	8,000	8,000	8,000	4,000	4,000
19. Ecotourism expert (Shenchacun Village)	month	2	4,000	0	8,000	0	0		8,000	5,000	1,500	1,500		
20. Biodiversity research scientist (research grants)	month	0.5	4,000	0	2,000	0	0		2,000	2,000				
21. Network design consultant	month	5	4,000	0	20,000	0	0		20,000	10,000	10,000			
22. GIS specialist	month	5	4,000	0	20,000	0	0		20,000	10,000	10,000			
23. Data base specialist	month	0.5	4,000	0	2,000	0	0		2,000	1,000	1,000			
24. Forest ecosystem health monitoring expert	month	14	4,000	0	56,000	0	0		56,000	9,332	18,668	18,666	4,667	4,667
25. Climate change monitoring expert	month	10	4,000	0	40,000	0	0		40,000	8,000	8,000	8,000	8,000	8,000
26. Information dissemination specialist	month	5	1,340	0	0	0	6,700		6,700	1,340	1,340	1,340	1,340	1,340
Sub-total national Consultants				72,840	286,520	2,840	91,600	71,000	524,800	112,692	225,528	82,526	52,027	52,027
5570 Sub-total consultants				72,840	374,020	65,340	91,600	71,000	674,800	177,192	287,028	106,526	52,027	52,027
5650 Contracts														
Biodiversity policy studies	Lump sum	2	2,800	5,600	0	0	0		5,600			2,800	2,800	
NR system study & plan	Lump sum	1	22,000	22,000	0	0	0		22,000		22,000			
Biodiversity study & plan	Lump sum	1	11,000	11,000	0	0	0		11,000		11,000			
Ecotourism study & plan	Lump sum	1	11,000	11,000	0	0	0		11,000		11,000			
Management plan formulation (Huangshan NSR)	Lump sum	1	40,000	0	40,000	0	0		40,000		40,000			

Jiulongfeng PNR Upgrading	Lump sum	1	80,000	0	80,000	0	0		80,000		80,000			
Trails (Shenchacun Village)	km	4.5	8,445	0	38,003	0	0		38,003		19,000	19,003		
Socio-economic baseline and monitoring study	Lump sum	1	40,000	0	40,000	0	0		40,000	8,000	8,000	8,000	8,000	8,000
NR ecosystem baseline and monitoring study (network)	Lump sum	1	64,300	0	64,300	0	0		64,300	12,860	12,860	12,860	12,860	12,860
Species distribution and monitoring study (network)	Lump sum	1	101,50 0	0	101,500	0	0		101,500	20,300	20,300	20,300	20,300	20,300
NR network system study (network)	Lump sum	1	11,000	0	11,000	0	0		11,000	11,000				
Land use study (landscapes)	lump sum	1	28,400	0	28,400	0	0		28,400	·	28,400			
Competitive research grants	grants	24	11,458	0	274,992	0	0		274,992		68,748	68,748	68,748	68,748
Post-project training evaluation	Lump sum	1	3,500	0	0	3,500	0		3,500					3,500
"Best-practice" evaluations	Lump sum	5	4,940	0	0	0	24,700		24,700					24,700
Midterm evaluation	study	1	40,000	0	0	0	40,000		40,000			40,000		
Final evaluation	study	1	40,000	0	0	0	40,000		40,000					40,000
5650 Sub-total Contracts				49,600	678,195	3,500	104,700	0	835,995	52,160	321,308	171,711	112,708	178,108
5900 Travel														
International	trips	6	5,000	0	20,000	10,000	0	0	30,000	10,000	10,000	10,000	0	0
National	trips	100	500	12,000	34,000	4,000	0	0	50,000	7,400	26,000	7,400	4,600	4,600
5900 Sub-total travel				12,000	54,000	14,000	0	0	80,000	17,400	36,000	17,400	4,600	4,600
5023 Training and workshops														
Cross-site visits (international)	person- visit	10	7,800	46,800	0	31,200	0		78,000	39,000	39,000			
Cross-site visits (local)	person- visit	30	447		0	13,410	0		13,410	2,682	2,682	2,682	2,682	2,682
BCC training event	workshop	2	5,450	10,900	0	0	0		10,900	5,450		5,450	_	
BCAC training event	workshop	2	5,600	11,200	0	0	0		11,200		5,600		5,600	
Co-management meetings	meetings	288	217	0	62,496	0	0		62,496	12,499	12,499	12,499	12,499	12,500
Village based NR training	person- times	3,750	22	0	84,000	0	0		84,000	16,800	16,800	16,800	16,800	16,800

Village training in ecotourism (Shenchacun Village)	person- times	400	22	0	8,800	0	0		8,800	4,400	2,200	2,200		
Ecotourism Study (Shenchacun Village)	study	10	1,080	0	10,800	0	0		10,800	5,400	5,400			
NR thematic workshops (capacity building)	workshops	42	3,522	0	0	147,924	0		147,924	23,466	46,936	23,466	23,466	23,466
Training of government officials (capacity building)	workshops	6	3,514	0	0	21,084	0		21,084	7,034	3,517	3,517	3,517	3,516
Local community training (capacity building)	workshops	10	3,638	0	0	36,380	0		36,380	7,280	7,280	7,280	7,280	7,280
Biodiversity and risk analysis	workshops	5	1,803	0	0	9,015	0		9,015	1,800	1,800	1,800	1,800	1,800
Training of primary and secondary teachers	person days	60	107	0	0	6,420	0		6,420	1,284	1,284	1,284	1,284	1,284
Training of HSRC interpretive staff	person days	66	111	0	0	7,326	0		7,326	2,442	1,221	1,221	1,221	1,221
Evaluation of PA effectiveness	study	5	1,820	0	0	9,100	0		9,100	1,820	1,820	1,820	1,820	1,820
Inception workshop	meetings	1	10,700	0	0	0	0	10,700	10,700	10,700				
PSC meetings	meetings	4	6,900	0	0	0	0	27,600	27,600		6,900	6,900	6,900	6,900
Mid-term evaluation workshop	workshop	1	11,300	0	0	0	11,300		11,300			11,300		
Final evaluation workshop	workshop	1	12,000	0	0	0	12,000		12,000					12,000
5023 Sub-total training				68,900	166,096	281,859	23,300	38,300	578,455	142,057	154,939	98,219	84,869	91,269
6000 Expendable procurement														
Co-management materials	Lump sum	20	1,820	0	36,400	0	0		36,400	7,280	7,280	7,280	7,280	7,280
Operational handbook (Shenchacun Village)	publication	1	1,317	0	1,317	0	0		1,317	1,100				
Training materials (capacity building)	lumpsum	15	6,100	0	0	91,500	0		91,500	18,300	18,300	18,300	18,300	18,300
Training needs assessment	lumpsum	1	1,300	0	0	1,300	0		1,300	1,300				
"Best-practice" reports	report	10,000	6	0	0	0	60,000		60,000					60,000
"Best-practice" compilation and editing	volume	2,000	11	0	0	0	22,000		22,000					22,000

6000 Sub-total expendable procure	ment			0	37,717	92,800	82,000	0	212,517	27,980	25,580	25,580	25,580	107,580
6100 Non-expendable procurement	t													
Billboards (HNSR)	units	45	1,120	0	0	50,400	0		50,400	16,800	16,800	16,800		
Office equipment (Wuxishan NR)	lumpsum	1	11,000	0	11,000	0	0		11,000		11,000			
Trail sign posts (Shenchacun Village)	units	3	15,400	0	46,200	0	0		46,200	30,800	15,400			
Desktop computers (network +)	units	26	638	0	16,588	0	0		16,588	16,588				
Laptop computers (NR network)	units	6	1,283	0	7,698	0	0		7,698	7,698				
Servers (network)	units	8	4,475	0	35,800	0	0		35,800	35,800				
Storage device (network)	units	2	14,900	0	29,800	0	0		29,800	29,800				
Cameras (network)	units	30	234	0	7,020	0	0		7,020	7,020				
SLR cameras with lenses (network)	units	2	3,000	0	6,000	0	0		6,000		6,000			
6100 Sub-total non-expendable pro	curement			0	160,106	50,400	0	0	210,506	144,506	49,200	16,800	0	0
6300 GOE budget														
Auditing	Audit	5	3,000	0	0	0	0	15,000	15,000	3,000	3,000	3,000	3,000	3,000
6300 Sub-total GOE budget				0	0	0	0	15,000	15,000	3,000	3,000	3,000	3,000	3,000
TOTAL				203,340	1,470,134	507,899	301,600	124,300	2,607,273	564,295	877,055	439,236	282,784	436,584

SUBTOTAL Comp 1	203,340	7.8%
SUBTOTAL Comp 2	1,470,134	56.4%
SUBTOTAL Comp 3	507,899	19.5%
SUBTOTAL Comp 4	301,600	11.6%
SUBTOTAL Project Management	124,300	4.8%
TOTAL GEF	2,607,273	100.0%

# **APPENDIX 4: RISK MANAGEMENT MATRIX**

Risk Description	Category	Impact	Likelihood	Mitigation Actions	Owner	Status
Inter-institutional	M	Project implementation could be	30 to 60 %	Project design has provided	BCC/HSAC/BGF/PMO	NA
Coordination. Poor		affected and undermine the		for adequate resources,		
coordination among		achievement of cost-efficiencies		both in terms of time and		
protected areas				financing, to support the		
administered by				needed consultation and		
different line agencies				participation to reach an		
could undermine the				agreed vision, strategy (the		
achievement of				policies and plans) and		
conservation				priority actions to be		
objectives by limiting				supported by the project.		
the effectiveness of				During project preparation,		
human and financial				initial consultative efforts		
resources in improving				laid the basis for the		
management of				development of the		
individual PAs and				necessary institutional		
their networks.				arrangements to support		
				project objectives. These		
				resulted in the		
				establishment of the		
				Biodiversity Consultative		
				Committee (BCC) led by		
				the municipal government		
				leaders with		
				representatives from all		
				participating sectors. Over		
				the longer term, the		
				sustainability of the		
				approach will be supported		
				through the project's		
				policy, institutional		
				arrangements and		
				strengthening and public		
				awareness activities.		
				During implementation, it		
				will be the primary task of		

				the PMO to ensure that the necessary institutional arrangements and consultation continue and to identify and resolve any potential issues early before they begin to affect implementation.		
Policy Formulation. Slow uptake of policy recommendations stemming from project supported policy studies could prolong the current situation characterized by growing threats to forest biodiversity, low management effectiveness and limited interinstitutional collaboration in response to existing threats and constraints.	M	Delays in project implementation and possible lack of a coordinated approach among certain project supported activities.	30 to 60 %	As a risk, this was addressed in project design through promoting a number of capacity building and public awareness raising activities in support of relevant policy reforms directed at both key decision makers as well as the public at large and includes site visits to areas where policy related studies and related activities are being supported. Working directly with the Municipal mayor's office through the BCC will facilitate policy reform. To monitor performance, the project has integrated tracking tools (in its M&E system). During the project inception workshop a proposal to integrate these with well-defined triggers to ensure a timely integration of policy reforms into municipal policy frameworks will be introduced and discussed.	BCC/HSAC/BGF/PMO	NA

Insufficient and timely provision of co-financing	L	Delay or possible cessation of certain project activities supported with respective cofinancing.	< 30 %	Environmental protection is becoming a high priority issue at all political levels in China including the conservation of biodiversity. The availability of co-financing	Project partners	Commitment letters confirming co-financing will be obtained at time of submission to GEFSEC
				is not judged to be a significant issue, particularly in the relatively well-developed municipality such as Huangshan. This assessment is further		
				supported by the high priority that the government is placing on ecotourism for the municipality's future development and economic		
Climate Change. Climate change as manifested through increased drought and heightened risk of forest fire could undermine the achievement of biodiversity conservation objectives	M	Could undermine ecosystem integrity and status of biodiversity including the validity of indicators measuring project impact	30 to 60 %	well-being.  The project will integrate inter-alia climate risks and climate proofing measures into the NR management plan preparation process as well as the planning process of specific NRs to promote the integration of adaptation measures.  Similarly, climate change variation will be taken into account in the monitoring programme and working with local communities in identification and piloting of alternative / sustainable livelihoods to account for climatic variability. The	BAC/PSC/PMO	NA

				project will also forge linkages and synergies with on-going projects and efforts to mainstream adaptation and to contribute to the knowledge base through its information dissemination and public awareness activities.		
Invasive Species. Forest pests (and other invasive species possibly associated with climate change) could affect the ecological "health" of the forest ecosystems targeted by the project.	L	Could undermine integrity of Huangshan's forest ecosystems and in turn affect biodiversity	< 30 %	The project will support a science based monitoring program to provide advance warning of possible outbreaks of pests and/or evidence of invasive species. Protocols will be established among PAs participating in the network for facilitate a coherent and cost-effective response to this risk.	BAC/PSC/PMO	Not a problem at present
Currency Risk. Significant fluctuation in foreign currency exchange rates may pose a risk to the achievement of all project outputs and outcomes.	M	Significant changes in USD rates vs. RMB could result in increase costs of local inputs and dilute co-financing.	30 to 60%	This has been addressed through incorporating appropriate price contingencies in the project budget	HSAC/BGF/FAO	NA

# **APPENDIX 5: PROCUREMENT PLAN** (To be completed at inception)

# DATE: PROJECT TITLE AND SYMBOL:

Ref. No.	Requirement	Unit	Estimated Quantities	Estimated Cost	Unit Price	Solicitation Method	Procurement Method	Buyer	Targeted Tender Launch Date	Targeted Contract Award Date	Targeted Delivery Date	Final Destination and Delivery Terms	Status	Other Constraints/Considerations

Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

#1. Draft Terms of Reference: Nature Reserve System Planner (international consultant)

#### **Background and Tasks**:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to maximum effectiveness and impact. Much of Huangshan's economic future will be based on the development of a service economy dependent on its biodiversity endowment. The municipality already has 61 protected areas unfortunately many of them are under-resources and too small to have achieved significant conservation. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Nature Reserve Planner working in close collaboration with his/her national counterparts (see separate TORs 14 and 15) will have the following responsibilities and functions:

- 1. Visit the project's priority nature reserve sites i.e., Huangshan NSR, Gunjiujiang NNR Qingliangfeng NNR (in Anhui), Jiulongfeng PNR, Wuxishan PNR, Tianhushan PNR and Lingnan PNR and others as deemed necessary;
- 2. Consult with HSAC staff, NR personnel, biodiversity conservation experts, provincial and national (e.g., SFA) NR administrative staff, NGOs and representatives from local communities and civil society on the role and status of nature reserves in Huangshan;
- 3. Provide strategic guidance and input in the development of a Nature Reserve System Plan to guide the future development, improvement and consolidation of Huangshan's nature reserve endowment over the next 10 to 15 years giving particular attention to the number and size of existing NRs, gaps in the protection of priority ecosystems, existing and projected financial and human resources, development trends, trends in other Chinese NRs guided by SFA policies and municipal policies and priorities;
- 4. Conduct an introductory workshop on preparing a nature reserve management plan;
- 5. Assist with inputs into the delivery of training courses for decision makers and local trainers led by the international and nation training experts (see separate TORs 6);
- 6. In collaboration with the local Management Planning Teams and Ecological Assessment Teams: (a) determine the data required to describe the baseline conditions in these reserves; (b) clarify objectives and develop options for conservation management of the reserves; (c) assist with the identification of indicators for each management plan's monitoring and evaluation program.

- 7. Prepare and submit a consolidated report outlining strategies and approaches for drafting the management plans and submit site-specific reports.
- 8. As part of the project's overall quality control procedures review each of the draft management plans produced for the target nature reserves; and
- 9. Provide input into the development of a project Monitoring and Evaluation Plan.

Qualifications: The candidate should have extensive experience in the preparation and implementation of nature reserve management plans and working their implementation (7 + years); knowledge of natural resource management issues; experience in the facilitation of training, workshops and meetings; demonstrated ability to work cooperatively with nature reserve staff and different stakeholders; and experience working in China and elsewhere in Asia.

# Additional Requirements:

Language: English (knowledge of Chinese is an advantage)

Headquarters: Huangshan, China

Duration: Six weeks throughout the 5 years of the Project.

#### Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality

# **FAO-GEF-HSAC Project**

#2. Draft Terms of Reference: Rural Sociologist (international consultant)

### **Background and Tasks**:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and impact. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Participatory Monitoring Specialist, working in close collaboration with his/her counterpart, have the following responsibilities and functions:

- 1. Become familiar with the project background and together with your counterpart visit a selected group of communities located in proximity to project supported nature reserves;
- 2. Provide guidance on the development of a participatory strategy to facilitate engagement of local communities living in proximity to the project supported nature natures in management planning and decisions;
- 3. Together with the ecosystem monitoring expert (see draft TOR 5) and through discussions with local villagers discuss and agree how best to engage villagers in local monitoring of nature reserves that both serves to educate them about the role of NR and the importance of biodiversity conservation but also provides a useful source of input into the NR data base;
- 4. Together with the project team assist in the design and establishment of the Co-management Consultation Committees (CCCs) in project supported villages and ensure their engagement with NR staff;
- 5. Together with the NR Training consultant design a training program for NR staff to facilitate their engagement with local communities;
- 6. Provide input into the development of a project Monitoring and Evaluation Plan; and
- 7. Provide training to relevant nature reserve staff and separate, decision-makers on the importance and means to more fully involve local communities in NR activities.

# Minimal Requirements:

The Rural Sociologist should be a post-graduate professional with a degree in rural sociology or related field (e.g., anthropology) with at least 10 years professional experience working in rural

communities in developing countries to include China. Working in past projects with communities involving nature reserve in particular would be a distinct advantage.

# Additional Requirements:

Language: English (in additional Chinese would be an advantage)

Headquarters: Huangshan, China

Duration: One-person month throughout the 5 years of the Project.

Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

**#3. Draft Terms of Reference: Ecosystem Monitoring Expert** (national consultant)

#### Background and Tasks:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum impact and effectiveness. Despite the municipality's biodiversity endowment, large number of nature reserves, importance in a tourism-based economy and increasing threats (e.g., alien species) there is no comprehensive, integrate monitoring program to assess and track the "health" of the ecological systems of Huangshan. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Ecosystem Monitoring Expert will have the following responsibilities and functions:

- 1. Working closely with your national counterparts responsible for ecosystem and climate change monitoring (see separate TORs 24 and 25) review and assess the existing relevant monitoring roles, activities and capacities in the municipality;
- 2. Design an integrated monitoring program that by definition will include the establishment of the necessary baselines (supported under separate project supported studies on biodiversity and socioeconomic characteristics of communities in proximity to NRs);
- 3. Assess available equipment (purchased with national counterpart funds) and project supported equipment for suitability to carry out the monitoring program and make recommendations for any changes/additions if warranted;
- 4. Ensure that the monitoring program addresses but is not limited to the following: key biodiversity indicators (including those identified for the project-supported NRs), METT scorecards, key risks to the NR and broader municipal ecosystems (e.g., alien species and the effects of climate change);
- 5. Identify roles and responsibilities for different partners in the data collection and monitoring effort (e.g., among NR staff and local villagers);
- 6. Provide training where required;
- 7. Data are collected in format suitable for inputting into the GIS data base supported under the Project (see separate draft TORs 22);

- 8. Capacity is sufficient to implement the monitoring program and make recommendations where needed to bring up to required levels; and
- 9. Propose necessary protocols to facilitate the sharing of data collection responsibilities.

# Minimal Requirements:

The Ecosystem Monitoring Expert should be a post-graduate professional, preferably with a degree in biodiversity conservation, ecosystem management or some directly related field (e.g. wildlife and forestry management or natural resource management. He/she must have at least 7 years of experience of demonstrated experience working in the design and implementation of field monitoring programs and the subsequent collection, storage and use of field data. Experience with nature reserves and local communities monitoring would be a distinct advantage.

# Additional Requirements:

Language: English (some Chinese would be an advantage)

Headquarters: Huangshan, China

Duration: One-person month throughout the 5 years of the Project.

Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

**#4. Draft Terms of Reference: Nature Reserve Training Expert** (international consultant)

#### **Background and Tasks**:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to maximum effectiveness and impact. Despite the importance given to biodiversity conservation in the Municipality reflected by the large number of nature reserves (61) they are underresourced and where there are staff many are poorly trained and lacking in awareness of modern management and planning concepts. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Nature Reserve Training expert working in close collaboration with the national training coordinator will have the following responsibilities and functions:

- 1. Review the project background and relevant documentation and visit selected project supported nature reserves;
- 2. Review existing Chinese curricula on nature reserve management;
- 3. Together with his/her counterpart and other NR management consultants (see separate TORs 14 and 15) assist in the design of a training needs assessment supported under the Project;
- 4. Review the results of the assessment and together with relevant counterparts prepare a training program to be implemented over the life of the project. The program should be based on a "training of trainers" approach and will be carried out by locally recruited Expert Trainers who themselves will receive training;
- 5. The program should be divided into different target groups. These are NR staff and managers, other government staff and local community leaders and clearly reflect different levels of content and difficulty dependent on target group;
- 6. The NR training component should be developed to capture staff in all the municipal reserves and provide flexibility to respond to differences in staff capacity (e.g., between national, provincial and country reserves); and
- 7. Training modules may include but not be limited to: (a) nature reserve management, (b) management and administration for protected areas, (c) patrolling, (d) field methodology and backcountry skills, (e) conservation monitoring, (f) biodiversity, ecology and biological conservation,

(g) community relations, (h) community-based approaches to conservation, (i) conservation education and extension (j) tourism management for protected areas.

# Minimal Requirements:

The Nature Reserve training expert should have (a) graduate level training in natural reserve management, natural resources management, biological conservation or other relevant discipline; (b) extensive experience with protected areas management at the cadre-level; (c) experience with teaching, and preferably with cadre-level in-service training (d) proficiency in English.

# Additional Requirements:

Language: English (spoke Chinese would be an advantage)

Headquarters: Huangshan, China

Duration: Six person weeks in the first 2 years of the Project.

Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

#### **# 5. Draft Terms of Reference: Nature Reserve Interpretation Expert** (international consultant)

#### **Background and Tasks**:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve (HNSR) to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to maximum effectiveness and impact. The HNSR created for its cultural and geological features is one of the country's top 10 tourist attractions and receives on average over 2 million visitors a year. It represents a significant potential opportunity to increase public awareness on the importance of biodiversity conservation and on the role of the municipal network of nature reserves to achieve this. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Nature Reserve Interpretation Expert will have the following responsibilities and functions:

- 1. Familiarize with the project and the basic project concepts to promote closer integration of biodiversity conservation as a management objective in HNSR and use HNSR to promote increase awareness of the municipal NR network and its biodiversity endowment;
- 2. Visit the HNSR and become familiar with existing infrastructure and equipment including the interpretation centre, trails, signage and other public awareness tools and techniques used in the Reserve;
- 3. Working closely with his/her counterparts prepare a detailed strategy and work plan to integrate biodiversity conservation considerations into the NSR interpretation infrastructure and public awareness program;
- 4. Work with the appropriate architects and engineers to prepare basic designs and budgets (prefeasibility level) to present to HNSR managers; and
- 5. Participate in workshop with HNSR, HSAC and other partners to present the team's recommendations.

#### Minimal Requirements:

The Nature Reserve Interpretation Expert should be a graduate professional with a degree in protected area management or related (e.g., biodiversity conservation, wildlife and forestry management, natural resource management, etc.) and at minimum 5 years of work experience in development of interpretive programs in one or more world class nature reserves and be knowledgeable of the latest

thinking and concepts in the development of public awareness in biodiversity conservation and the roles of nature reserves in achieving same.

# Additional Requirements:

Language: English (Chinese would be an advantage)

Headquarters: Huangshan, China

Duration: One-person month over the first 2 years of the Project.

#### **APPENDIX 6: DRAFT TERMS OF REFERENCE (TORS)**

#### PEOPLE'S REPUBLIC OF CHINA

Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality
Project

#### **FAO-GEF-HSAC**

# 6. Draft Terms of Reference: Senior Technical Nature Reserve Specialist (national consultant)

#### Background and Tasks:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and impact. A key challenge to be addressed in the Project will be to promote a change in the institutional culture to the management of nature reserve in Huangshan Municipality from a top down, sectoral approach to a broader, multi-disciplinary approach involving NR staff, communities and other stakeholders bottom-up approach to ensure their long-term sustainability. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Senior Technical Nature Reserve Specialist will have the following responsibilities and functions:

- 1. Providing technical support to all relevant aspects of the Project to include but not be limited to: (a) preparing TORs, (b) participation in the identification and selection of consultants, (c) monitoring the quality of the work of consultants and (d) review and evaluation of consultant products;
- 2. Responding to the technical needs of the participating nature reserves when required;
- 3. Identifying training opportunities for project and NR staff;
- 4. Providing technical advice to the Project Manager and PSC;
- 5. Coordinating the technical inputs of the international consultants to maximize their utility for the interests of the Project;
- 6. Provide training when needed;
- 7. Identification of technical needs in the nature reserves and propose mitigation measures as needed;
- 8. Provide general technical guidance and support to the PM, HSAC counterparts, consultants and partners:

- 9. Serve as a liaison between the PM and the national and international technical consultants contracted under the project to include but not be limited to drafting TORs, identifying candidates and advising on their selection, monitoring their work and reviewing and evaluating their final products;
- 10. Working closely with the international and national consultants responsible for the development of the project's master training plan, ecological "health" monitoring program and nature reserve system plan and specific NR plans and their subsequent implementation;
- 11. Establish communication linkages with technical counterparts in other national and international nature reserves to facilitate the exchange of information and building of partnerships;
- 12. Identifying training opportunities for NR staff, decision makers and other stakeholders in support of project objectives;
- 13. Working closely with the national consultant on co-management to ensure that project supported initiatives meet the standards of best practice as achieved elsewhere in China;
- 14. Ensure that the METT scorecards are filled out in correct and timely matter; and
- 15. Other tasks as specified.

#### **Minimal Requirements:**

The Senior Technical Nature Reserve Specialist should have an advance graduate degree, preferably in biodiversity conservation or some directly related field (e.g. wildlife, natural resource management, protected area management, etc.). He/she must have at least 7 years of experience working as a technical expert in nature reserves in China and familiar with both the administrative and technical aspects of biodiversity conservation. Experience in internationally funded projects will be especially considered.

# Additional Requirements:

Language: Chinese and English

Headquarters: Huangshan, China

Duration: 60 person months throughout the 5 years of the Project.

Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

**#7. Draft Terms of Reference: Monitoring and Evaluation Specialist** (national consultant)

#### Background and Tasks:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and impact. The Project will develop and implement a monitoring and evaluation program to assess the performance and impacts of project activities. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Monitoring and Evaluation Specialist will have the following responsibilities and functions:

- 1. Become familiar with the project background and monitoring and reporting requirements of FAO and GEF;
- 2. Development of a computer based M&E program in conformity with the reporting requirements of FAO and GEF;
- 3. In close collaboration with Project's Senior Nature Reserve Specialist (see separate TORs # 1), incorporate a technical monitoring module into the M&E program that can provide reporting outputs in support of the METTs and other technical monitoring supported under the Project;
- 4. Preparation of a M&E reporting templates to calendar to facilitate providing inputs into the M&E program;
- 5. Providing of training to all project staff and participating partners responsible for providing M&E inputs; and
- 6. Other tasks as required.

# **Minimal Requirements:**

The Monitoring and Evaluation Specialist should be a graduate professional, preferably with a degree in biodiversity conservation, or some directly related field (e.g. wildlife management, natural resource management, natural resource economics, etc.). He/she must have at least 5 years of experience working in monitoring and evaluation of projects preferably with familiarity with different M&E software programs. Customize programming to meet specific project needs would be an advantage. Proven ability to work in a team environment as a core member of the PMO is essential.

#### Additional Requirements:

Chinese and English Huangshan, China 60 months over the 5-year Project Language: Headquarters: Duration:

# Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

**#8. Draft Terms of Reference: Biodiversity Policy Expert** (national consultant)

#### Background and Tasks:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and impact. For the Project to sustain its achievements an enabling policy framework supporting the long-term conservation of biodiversity needs to be established. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Biodiversity Policy Expert will have the following responsibilities and functions:

- 1. Review and become knowledgeable of the local regulatory framework affecting the conservation of biodiversity in Huangshan Municipality;
- 2. Identify the main gaps/needs required to be addressed to provide a comprehensive regulatory and policy regime to ensure the safeguarding municipal biodiversity resources;
- 3. Draft local implementing regulations in support of national and provincial legislation enacted to conserve biodiversity; and
- 4. Initially identify potential new policy instruments to be tested during project implementation that address one or more policy gaps/failures that affect the conservation of biodiversity in Huangshan municipality (e.g., ecological compensation policy to provide a source of financing for biodiversity conservation activities in Huangshan municipality, strategic environmental impact assessments (SEIA) and other tools to economic development sector's plans and programs to mitigate unintentional impacts of biodiversity, etc.).

#### Minimal Requirements:

The policy specialist should be a graduate professional, preferably with a degree in legal/institutional, or some directly related field. He/she must have at least 5 years of experience working as a policy specialist and possess a demonstrated work experience in China's environmental and biodiversity legal frameworks.

#### **Additional Requirements:**

Language: Chinese and English

Headquarters: Huangshan, China

Duration: 4 person months throughout the 5 years of the Project

# Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

**#9. Draft Terms of Reference: NR System Policy Expert** (national consultant)

# **Background and Tasks**:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness. For the Project to sustain its achievements an enabling policy framework supporting the establishment and maintenance of a municipal Nature Reserve systems needs to be created. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the NR System Policy Expert will have the following responsibilities and functions:

- 1. Review and become knowledgeable of the local regulatory framework affecting the establishment and maintenance of nature reserves at the national, provincial and county levels (including ability to generate and maintain income sources) in Huangshan Municipality;
- 2. Identify the main gaps/needs required to be addressed to provide a comprehensive regulatory and policy regime to enable the creation of a long term NR network and its constituent reserves; and
- 3. Draft local implementing regulations in support of national and provincial legislation enacted to conserve biodiversity;

# **Minimal Requirements:**

The NR System Policy Expert should have a graduate professional, preferably with a degree in legal/institutional, or some directly related field. He/she must have at least 5 years of experience working as a policy specialist and possess a demonstrated work experience in China's environmental and biodiversity legal frameworks.

#### Additional Requirements:

Language: Chinese (additionally English would be an advantage)

Headquarters: Huangshan, China

Duration: 4 person months throughout the 5 years of the Project.

# Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

**# 10. Draft Terms of Reference: Alien Species Policy Expert** (national consultant)

#### Background and Tasks:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to maximize effectiveness and impact. One threat to Huangshan's biodiversity endowment that has become increasingly apparent is growing presence of alien species in municipal ecosystems. A total of 81 exotic species have been identified to date including species contributing to significant ecological damage often with economic costs such as pinewood nematode, and water hyacinth. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Alien Species Policy expert will have the following responsibilities and functions:

- 1. Become familiar with the project and the current situation with respect to the introduction and impact of alien species on the municipal ecosystems;
- 2. Review and evaluate existing legislation and policies (failures, gaps) that may be contributing to the situation; and
- 3. Working closely with the HSAC coordinate the formation of a local consultative group of experts to review the situation and formulate recommendations that should include but not be limited to: (a) degree of threat of each species, (b) a science-based monitoring and control plan, (c) regulatory and policy recommendations, (d) training in monitoring and enforcement, (e) increasing public awareness of the issue and (f) preparing a budget to implement these aforementioned actions.

#### Minimal Requirements:

The Alien Species Policy Expert should be a graduate professional, preferably with a degree in biodiversity conservation or some directly related field (e.g. wildlife management, natural resource management, natural resource economics, etc.). He/she must have at least 5 years of experience working with some aspect of alien species and their impacts on local ecosystems and demonstrate familiarity with policy frameworks and specific policies that can contribute to mitigation of the problem.

# Additional Requirements:

Language: Chinese (English in addition would be considered an advantage)

Headquarters: Huangshan, China

Duration: 4 person months throughout the 5 years of the Project.

Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

# 11. Draft Terms of Reference: NR System Planning Consultant (national consultant)

#### Background and Tasks:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic interventions provided by the Project to maximum effectiveness. Despite the importance given to biodiversity conservation in the Municipality reflected by the large number of nature reserves (61) many are too small to achieve their intended objectives, under-resourced and ineffective. There is a need to rationalize and consolidate the many NRs under a comprehensive systematic framework. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the NR System Planning Consultant will have the following responsibilities and functions:

- 1. Working in close collaboration with the other NR and biodiversity consultants of the project team (see separate draft TORs 12, 14 and 15) review and update any available inventories of all the nature reserves in Huangshan;
- 2. Visit project supported NRs as well as other selected municipal NRs representing the range of NRs found in the municipality (by ecosystem and level [e.g., county, provincial and national);
- 3. Assess their capacity to achieve the conservation of biodiversity as their principle mission and management objective both in terms of their physical characteristic and human and financial resources:
- 4. Working closely with the HSAC coordinate the formation of a local consultative group of experts to review the situation and formulate recommendations that should include but not be limited to: (a) strengthening of existing NRs as priorities, (b) consolidation of existing nature reserves, (c) designation of new NRs where gap analysis indicates representative samples of Huangshan ecosystems are not under conservation management authority and in extreme cases, removing designation of NR status of individual sites; (e) financial sustainability of individual sites and the broader system and (f) a "road map" leading the establishment to municipal system of NRs to include stated objectives, milestones, calendar and budget.
- 5. Based on the recommendations from task 3 above, prepare the NR system plan.

# Minimal Requirements:

The NR System Planning Consultant should have a post-graduate degree in national park planning, biodiversity conservation or some directly related field (e.g. wildlife and forestry management, natural resource management, etc.). He/she must have at least 5 years of practical experience working in China's nature reserves preferably some of which includes NR systems planning.

# Additional Requirements:

Language: Chinese (additionally English would be an advantage)

Headquarters: Huangshan, China

Duration: 2.5 person months throughout the 5 years of the Project.

# Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

# 12. Draft Terms of Reference: Biodiversity Planner-HNSR (national consultant)

# **Background and Tasks**:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic and timely interventions provided by the Project to ensure maximum effectiveness and impact. A key activity supported under the Project will be the preparation of a long-term plan to promote the conservation of biodiversity in the future development of Huangshan whose economy will increasing be based on a "green economy" an ensuring its "mainstreaming" into other economic sectors. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Biodiversity Planner will have the following responsibilities and functions:

- 1. Review and become knowledgeable on the existing environmental and nature resource endowment characteristic of Huangshan Municipality;
- 2. Working closely with the members of the management team familiarize yourself with the NR system, existing efforts and conservation of biodiversity and main threats and constraints;
- 3. Evaluate other sector institutions and private sector and their impacts (adverse and positive) on municipal biodiversity (e.g., through poor planning, lack of understanding of current legislation/policy, etc.);
- 4. Together with the policy expert (see separate TORs 8) identify policy failures/gaps contributing to loss of biodiversity through poor planning and development; and
- 5. Develop in close consultation with HSAC and with the participation of other municipal government sector agency officials, a medium-term plan leading to "mainstreaming" biodiversity conservation considerations into sector development planning assessment and decision-making. Consideration should be given but not be limited to the promotion of: (a) training and increasing awareness, (b) use of Environmental and Strategic Environmental Assessments, (c) hiring of additional staff and (d) development of sector plans and policies.

#### Minimal Requirements:

The Biodiversity Planner should be a graduate professional, preferably with a degree in biodiversity conservation or some directly related field (e.g. wildlife management, natural resource management, natural resource economics, etc.). He/she must have at least 5 years of experience working with sector

agencies and the promotion of environmental considerations into sector planning and policies and familiarity with SEIA/EIA and other tools to reduce adverse environmental impacts associated with development activities.

# Additional Requirements:

Language: Chinese (additionally English would be desirable)

Headquarters: Huangshan, China

Duration: 4 person months throughout the 5 years of the Project.

Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality

#### **FAO-GEF-HSAC Project**

**#13. Draft Terms of Reference: Ecotourism Planner** (national consultant)

#### **Background and Tasks:**

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and impact. An estimated 30 % of Huangshan's economy is based on tourism; a percentage of economy that is projected to grow in the coming years. A key pillar to future economic growth is to diversify the tourism experience to increasingly avail of the municipality's rich natural resources and nature reserves. This needs to be done in a careful and balance approach to avoid adverse impacts on the environment and ecosystems. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Ecotourism Planner will have the following responsibilities and functions:

- 1. Become familiar with the project back ground and context including the recently awarded contract to Anhui University to formulate the Ecotourism Forestry Master Plan on behalf of the Municipal Tourism Commission;
- 2. Meet with the principals responsible for the aforementioned plan and review progress to date and assess to what degree biodiversity conservation principles have been integrated into the draft plan;
- 3. Working closely with the HSAC, the Municipal Forest Commission and Anhui University, coordinate the formation of a local consultative group of experts to review the situation and formulate recommendations designed to ensure the biodiversity conservation principles are integrated into the draft master plan; and
- 4. Follow-up recommendations has needed in the finalization of the Plan.

# Minimal Requirements:

The Ecotourism Planner should be a graduate professional, preferably with a degree in nature tourism (additional training in biodiversity conservation, park management or some directly related field (e.g. wildlife and forestry management, natural resource management, natural resource economics, etc.) would be an advantage. He/she must have at least 5 years of experience of practical experience working in ecotourism development with an emphasis on China's nature reserves.

# Additional Requirements:

Language: Chinese (additionally English would be an advantage)

Headquarters: Huangshan, China

Duration: 5.5 person months throughout the 5 years of the Project.

# Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

#14. Draft Terms of Reference: Management Plan Specialists-HSCR (national consultant)

# **Background and Tasks**:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and impact. In recognition of the increasing importance biodiversity conservation will play in the future economic development of the municipality HSAC will incorporate this as a management objective in the Huangshan National Scenic Reserve; one of the most visited NR in China. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Biodiversity Conservation Planner will have the following responsibilities and functions:

- 1. Review the existing master and operation plans for HNSR;
- 2. Working closely with the rest of the project team and consultants, in particular the NR system planner and NR interpretation expert (see separate TORs 3 and 7, respectively) evaluate the biodiversity features of the HNSR, threats and needed conservation measures;
- 3. Identify how best to maximize the biodiversity endowment for conservation, scientific, public education and recreational purposes with minimal adverse impact;
- 4. Evaluate existing human and budgetary resources and available to support the integration and implementation of biodiversity as management objective in HNSR;
- 5. Organize a workshop with HNSR staff and propose and discuss requirements to achieve the integration and implementation of biodiversity as a HNSR management objective; and
- 6. Draft a sector management plan in conformity with the HNSR master plan that will support the biodiversity conservation objective to include work plan and budget.

#### Minimal Requirements:

The biodiversity conservation planner should be a graduate professional, preferably with a degree in biodiversity conservation or some directly related field (e.g. wildlife management, natural resource management, natural resource economics, etc.). He/she must have at least 5 years of experience working in one or more of China's national nature reserves in planning and management. Proven working experience and the ability to generate links with diverse partners/stakeholders (public and

private sectors, academia, etc.) and experience in project coordination with international bodies will be especially considered.

# Additional Requirements:

Language: Chinese (additionally spoken English would be an advantage)

Headquarters: Huangshan, China

Duration: 4 person months over the 5 years of the Project.

Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

# # 15. Draft Terms of Reference: Management Plan Specialists-Other 5 NRs (national consultant)

#### Background and Tasks:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and impact. In recognition of the increasing importance biodiversity conservation will play in the future economic development of the municipality HSAC will increasingly promote visitation to national, provincial and to a lesser extent municipal nature reserves. In anticipation of increased visitation management plans need to be prepared (or updated in some cases) and implemented to ensure that visitor facilities are available while biodiversity will not be adversely impacted. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Biodiversity Conservation Planner working closely with the rest of the project team and consultants, in particular the NR system planner and NR interpretation expert (see separate TORs 3 and 7, respectively) will have the following responsibilities and functions:

- 1. Visit each of the project's sites in Huangshan (i.e., Huangshan NSR, Gunjiujiang NNR Qingliangfeng NNR (in Anhui), Jiulongfeng PNR, Wuxishan PNR, Tianhushan PNR and Lingnan PNR);
- 2. Assist the Nature Reserve Management Specialist (international) in conducting an introductory workshop on preparing a nature reserve management plan.
- 3. In collaboration with the local NR staff: (a) examine current zoning arrangements in each of the project's nature reserves and assess whether any biologically significant ecosystems are underrepresented; (b) determine the data required to describe the baseline conditions in these reserves; (c) clarify objectives and develop options for conservation management of the reserves; and (d) assist with the identification of indicators for each management plan's monitoring and evaluation program;
- 4. Assist the local NR teams as required to develop to a long-term management plan.

# Minimal Requirements:

The biodiversity conservation planner should be a graduate professional, preferably with a degree in biodiversity conservation or some directly related field (e.g. wildlife management, natural resource management, natural resource economics, etc.). He/she must have at least 5 years of experience working in one or more of China's national nature reserves in planning and management. Proven working experience and the ability to generate links with diverse partners/stakeholders (public and

private sectors, academia, etc.) and experience in project coordination with international bodies will be especially considered.

# Additional Requirements:

Language: Chinese (additionally spoken English would be an advantage)

Headquarters: Huangshan, China

Duration: 5 person months over the 5 years of the Project.

Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

#16. Draft Terms of Reference: Operational Plan Specialist-HNSR (national consultant)

#### Background and Tasks:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic interventions provided by the Project to achieve maximum effectiveness and impact. Closely linked to the preparation of the biodiversity sector management plan for HNSR will be the preparation of a 5 year operational plan that will guide the implementation of project supported activities. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Operational Plan Specialist will have the following responsibilities and functions:

- 1. Review and become familiar with the background project context and documents in particular the activities that are being supported under the project (with both GEF funds and co-financing for HNSR);
- 2. Review the draft sector plan being prepared under draft TORs 14 for HNSR;
- 3. Working closely with the rest of the project team and consultants, in particular the NR system planner and NR interpretation expert (see separate TORs 3 and 7, respectively) review various models suitable to base a 5 year operational plan; and
- 4. Draft a 5-year operational plan in conformity with the HNSR master plan that will support the biodiversity conservation objective to include calendar and budget.

# Minimal Requirements:

The biodiversity conservation planner should be a graduate professional, preferably with a degree in biodiversity conservation or some directly related field (e.g. wildlife management, natural resource management, natural resource economics, etc.). He/she must have at least 5 years of experience working in one or more of China's national nature reserves in planning and management.

#### Additional Requirements:

Language: Chinese (additionally spoken English would be an advantage)

Headquarters: Huangshan, China

Duration: 4 person months over the 5 years of the Project.

#### PEOPLE'S REPUBLIC OF CHINA

# Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

#### #17. Draft Terms of Reference: Operational Plan Specialist-Other 5 NRs (national consultant)

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic interventions provided by the Project to achieve maximum effectiveness and impact. Closely linked to the preparation of the management plans for the remaining 5 nature reserves supported under the project will be the preparation of a 5 year operational plans that will guide the implementation of project supported activities. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Operational Plan Specialist will have the following responsibilities and functions:

- 1. Review and become familiar with the background project context and documents in particular the activities that are being supported under the project (with both GEF funds and co-financing for the 6 project supported nature reserves;
- 2. Review the draft sector plan being prepared under draft TORs 15 for these 5 nature reserves;
- 3. Working closely with the rest of the project team and consultants, in particular the NR system planner and NR interpretation expert (see separate TORs 3 and 7, respectively) review various models suitable to base a 5 year operational plan; and
- 4. Draft a 5-year operational plan in conformity with the nature reserve respective management plans that will support the biodiversity conservation objective to include calendar and budget.

# Minimal Requirements:

The Operational Plan Specialist should be a graduate professional, preferably with a degree in biodiversity conservation or some directly related field (e.g. wildlife management, natural resource management, natural resource economics, etc.). He/she must have at least 5 years of experience working in one or more of China's national nature reserves in planning and management.

#### Additional Requirements:

Language: Chinese and English

Headquarters: Huangshan, China

Duration: 5 person months throughout the 5 years of the Project.

Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality

# **FAO-GEF-HSAC Project**

**# 18. Draft Terms of Reference: Co-management Specialist** (national consultant)

#### Background and Tasks:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and impact. A critical tool to support this approach will be the participation of local communities living in proximity to many of the project-supported NRs. Despite successful experiences elsewhere demonstrating the utility of creating partnerships between NR staff and local communities this approach has yet to be adopted in Huangshan. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Comanagement Specialist will have the following responsibilities and functions:

- 1. Review all project documents and documents relevant to Huangshan Nature Reserves;
- 2. In collaboration with the HSAC make a cross site visit to Guangxi and review the experiences of the GEF-supported Guangxi Biodiversity Conservation Project with respect to promoting community participation in NR management planning;
- 3. Together with the Rural Sociologist (see separate draft TORs 4) and the other NR consultants (see draft TORs 14 and 15) further define, develop and revise a methodology and process for integrating communities, local governments, and nature reserve management in more collaborative approaches to nature reserve management and in participatory monitoring of project impacts;
- 4. Coordinate this process at project sites including advising on the organization of nature reserve Community Relations Sections (CRS), prefecture District Conservation Committees and local Comanagement Coordination Committees (CCC) including the drafting of community technical training plans by the CCC;
- 5. Deliver training on appropriate field methodology for enhancing cooperation with communities for nature conservation in courses designed for nature reserve staff;
- 6. Develop suitable workshop methods for the preparation of annual work plans that allow for the participation of nature reserve CRS staff and community members;
- 7. Provide input into the development of a project Monitoring and Evaluation Plan (see separate draft TORs 2); and
- 8. Actively participate in the preparation and revision of annual work plans.

# Minimal Requirements:

The co-management specialist should be a graduate professional, preferably with a degree in forestry, agricultural economy or sociology and at least ten years field experience in community forestry or participatory approaches to community development. He/she should have substantial working experience in communities and government agencies preferably on community-based management of protected areas or community-based natural resources management projects in rural areas; a demonstrated ability to work collaboratively with nature reserve staff and other stakeholders and experience with teaching, and preferably with in-service training.

# Additional Requirements:

Language: Chinese (spoken English would be an advantage)

Headquarters: Huangshan, China

Duration: 8 person months throughout the 5 years of the Project.

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# **FAO-GEF-HSAC Project**

**# 19. Draft Terms of Reference: Ecotourism Expert** (national consultant)

#### Background and Tasks:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and impact. One of the key activities supported under the Project will be a pilot activity implemented will local villagers living in proximity to a nature reserves to promote their participation and increased economic well-being with the development of ecotourism. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Ecotourism Expert will be responsible for the following responsibilities and functions:

- 1. Become familiar with the project background and project documents in particular those activities proposed for ecotourism development in Shenchacun Village under the project's co-management and sustainable development sub-component;
- 2. Meet and discuss the village survey with the national consultant contracted during project preparation;
- 3. Visit Shenchacun village and discuss and assess the proposed ecotourism activities with local villagers preferably together with the co-management consultant (see separate TORs 18);
- 4. Finalize the proposed activities including a work plan and budget;
- 5. Development an appropriate training program for local villagers to maximize their participation and economic benefit with the development of ecotourism as a sustainable economic activity associated with the adjacent nature reserve;
- 6. Ensure that there is close collaboration and integration of any proposed ecotourism activities with NR staff, the creation and operationalization of the local CCC and the need to conserve biodiversity through the participating nature reserve; and
- 7. Develop and participate in monitoring the development of the activity and provide support to the village as needed particularly in the early stages of implementation of the project activity.

# Minimal Requirements:

The Ecotourism Expert should be a graduate professional, preferably with a degree in environment or natural sciences with at least seven years practical experience working with local communities in ecotourism preferably in association with one or more China's nature reserves.

# Additional Requirements:

Language: Chinese (spoken English would be an advantage)

Headquarters: Huangshan, China

Duration: 2 person months throughout the 5 years of the Project.

Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

# 20. Draft Terms of Reference: Biodiversity Research Scientist (national consultant)

#### **Background and Tasks**:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and project impact. A key element supported by the project will be to introduce a science based approach to the planning and management of municipal NRs in support of more informed decision-making. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Biodiversity Research Scientist will have the following responsibilities and functions:

- 1. Review background project documents;
- 2. Evaluate the existing approach, processes and human and financial resources used in selected municipal nature reserves to plan and manage the conservation of biodiversity;
- 3. Together with other members of the project team and consultants in particular the NR planner (see separate draft TORs 11) identify the main characteristics of the existing knowledge base of the municipal ecosystems to include main threats and data gaps;
- 4. Together with members of the team and NR staff identify what the critical data needs are to promote more effecting NR management; and
- 5. Design a grant facility to be administered by the PMO. This should include but not be limited to: selection criteria for grants, increasing awareness of the existence and processes of the facility to research organizations, review and selection procedures, participation of NR staff, publication and distribution of the results, incorporation of the results in NR management and operational plans and monitoring and evaluation of the research activities.

### **Minimal Requirements:**

The biodiversity research scientist should be a graduate professional, preferably with a degree in biodiversity conservation or some directly related field (e.g. wildlife management, natural resource management, natural resource economics, etc.). He/she must have at least 5 years of experience working as a researcher preferably with some background in grant administration. Proven working experience and the ability to generate links with the research community would be highly desirable.

# Additional Requirements:

Language: Chinese (spoken English would be an advantage)
Headquarters: Huangshan, China
Duration: 2 person weeks in the first year of the Project.

# Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

# 21. Network Design Consultant: (national consultant)

#### Background and Tasks:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and impact. One project-supported initiative is the development of a computer-based network among 12 national and provincial nature reserves to provide a basis to promote increased cooperation and closer ties among NR staff through exchange of information and experiences. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Network Design Consultant will have the following responsibilities and functions:

- 1. Visit the 12 project supported nature reserves and assess their existing technical infrastructure and human capacity to support an information network;
- 2. Meet with representatives of the Huangshan Tourism Development Corporation (HTDC) and get briefed on the Huangshan-wide information-based initiative of which the GEF supported network will be integrated and become a part;
- 3. Based on this background, design a computer based network with a geographic information system (GIS) capacity that would serve to: (a) provide an information tool to improve local NR planning and management decision-making, (b) facilitate exchange of information between NRs and (c) be compatible with the aforementioned Tourism Development Corporation initiative. This should include the technical design, budget, training program and calendar. Of particular concern is to ensure the spatial-reference data base is integrated with data generated associated with project supported monitoring programs; and
- 4. Participate in the preparation of technical specifics for bidding and evaluation and selection of bids (if required).

### Minimal Requirements:

The Network Design Consultant should be a graduate professional with a degree in computer sciences, information management and/or related field and have 5 + years of practical experience in the design of information management systems including the use of GIS. He/she should have demonstrated experience in the development and implementation of training modules associated with the preparing end users to apply these systems.

# Additional Requirements:

Chinese (English would be an additional advantage)

Language: Chinese (English would be an additional advantage)
Headquarters: Huangshan, China
Duration: 5 person months throughout the 5 years of the Project.

# Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

# 22. Draft Terms of Reference: GIS Expert (national consultant)

#### Background and Tasks:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and impact. Geo-referenced information systems and demonstrated their usefulness in increasing informed decision-making in all sectors including the planning and management of nature reserves. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the GIS Expert will be responsible for ensuring that this happens in an effective and lasting manner, he/she will have the following responsibilities and functions:

- 1. Organize and visit the Guangxi Provincial Forestry Bureau (BFD) PMO responsible for the recently closed GEF supported Biodiversity Conservation Project to include site visits to one or more nature reserves that have adopted a geo-referenced information system and assess and evaluate the lessons learned and experiences from this activity;
- 2. Visit, preferably with the data network expert (see draft TORs 21), the 12 project supported nature reserves in Huangshan and assess their existing technical infrastructure and human capacity to develop and support a geo-referenced information system;
- 3. Select an appropriate system (e.g., ArcInfo) and develop a training program for NR staff to become knowledgeable in its use and application for nature reserve planning and management; and
- 4. Finalize a technical proposal that includes design, training, budget and calendar to develop and roll out the recommended system.

#### Minimal Requirements:

The GIS Expert should be a graduate professional with a degree in computer sciences, information management and/or related field and have 5 + years of practical experience in the design of georeference information management systems including the use of ArcInfo. He/she should have demonstrated experience in the development and implementation of training modules associated with the preparing end users to apply these systems. Demonstrated experience in developing these systems for NR planning and management would be an advantage.

#### **Additional Requirements:**

Language: Chinese (E. Headquarters: Huangshan, China Duration: 5 person me Chinese (English would be an additional advantage)

5 person months throughout the 5 years of the Project.

# Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

#23. Draft Terms of Reference: Data Base Specialist (national consultant)

#### Background and Tasks:

The 5 year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions supported by the Project to achieve maximum effectiveness and impact. One of the main sets of activities supported under the Project will be the initial establishment of a network of selected NRs that will be joined by other NRs as they gain capacity. One of the pillars of the network will be the establishment of an inter-linked database providing participating NRs to exchange information and learn and exchange experiences. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Data Base Specialist (national consultant) will be responsible for the following responsibilities and functions:

- 1. Together with the project team including the participating reserve managers and their technology officers and the consultants responsible for biodiversity conservation, nature reserve planning and socio-economic aspects of the project (see draft TORs 12, 15, and 18, respectively) define the basic information parameters that will comprise the data base;
- 2. Evaluate the hardware and software capacity required to support a network connecting the HSAC and the following 12 participating NRs;
- 3. Design the network and prepare technical specifications required for procurement (to include technical support and periodic upgrades);
- 4. Prepare a training program for NR staff to maintain the network;
- 5. Ensure collaboration with the consultants associated with the monitoring program (see separate draft TORs 20, 24 and 25) to ensure that field data can be easily inputted into the data base; and
- 6. Assist with the establishment and operationalization of the system following purchase of all equipment.

#### Minimal Requirements:

The Data Base Specialist should be a graduate professional with at least 5 years in the design of data base systems and in training users in same. He should be knowledgeable of latest technologies and be able to prepare specifications for and assist in evaluation of procurement of the equipment.

# Additional Requirements:

Language:ChineseHeadquarters:Huangshan, ChinaDuration:2 person weeks in the first year of the Project.

Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

# 24. Draft Terms of Reference: Forest Ecosystem Health Monitoring Expert (national consultant)

#### Background and Tasks:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and impact. A key challenge to the conservation of biodiversity is to ensure the broader ecological health of the ecosystems represented by the network of nature reserves; conditions and circumstances that are often beyond the influence of NR themselves. A first step to meeting this challenge is to have a program in place that monitors changes in conditions in the relevant ecosystems. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Forest Ecosystem Health Monitoring Expert will have the following responsibilities and functions:

- 1. Become familiar with the project background, context and approach;
- 2. Together with the project team, consultants (in particular the experts on ecosystem monitoring [international], biodiversity, climate change and alien species (see separate draft TORs 5, 12, 25 and 10) and invited experts discuss and identify the approach, key parameters and technology needs to design and implement an integrated monitoring program. This program should include relevant parameters specified under the METT scorecards and include all but not be limited to project supported nature reserves;
- 3. Develop specifications and assist in the evaluation of procurement of any additional technical equipment needed to support the program;
- 4. Define clear roles and responsibilities for the partners in supporting the program including scientists, NR staff and communities, the latter in collaboration with the rural sociologist (see separate draft TORs 4) to design a pilot program for involving local community members and nature reserve management staff in collaborative approaches to monitoring and evaluation of project impacts;
- 5. Working closely with the rural sociologist and monitoring expert (see separate draft TORs 4 and 2) assist with the development and implementation of a monitoring program involving communities and nature reserve staff that will provide a useful input into the broader monitoring program as well as engage participants in NR and biodiversity conservation activities;
- 6. Develop training protocols, manuals and provide training in monitoring differentiated by the previously cited groups; and

7. Provide input into the development of a project Monitoring and Evaluation Plan.

# Minimal Requirements:

The Forest Ecosystem Health Monitoring Expert should be a post-graduate forest professional with demonstrable experience in monitoring of natural forest ecosystem preferably in or similar to ecosystems found in Huangshan. The candidate should be able to demonstrate experience and willingness to work with different groups of partners and ability to integrate different levels and quality into a meaningful monitoring program. Lastly, he/she should be able to translate and impart relative technical concepts to groups of partners of varying background ranging from professionals to local villagers.

# **Additional Requirements:**

Language: Chinese and English

Headquarters: Huangshan, China

Duration: 14 person months over the first 2 years of the Project.

# Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

#### #25. Draft Terms of Reference: Climate Change Monitoring Expert (national consultant)

# **Background and Tasks**:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and impact. A potential key threat to Huangshan's biodiversity may be attributable to the effects of climate change. There is already some evidence CC effects may include changes in distribution of native species, increase vulnerability of ecosystems to the effects of alien species and other pests and shifts in breeding times of some species. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Climate Change Monitoring Expert will have the following responsibilities and functions:

- 1. Review the scientific literature concerning the possible climate change related effects on Huangshan's representative ecosystems;
- 2. Assess the potential threats to these ecosystems and critical foundation species if the effects of climate change continue unabated;
- 3. Propose and cost out practical activities designed to promote adjustments to the conservation of biodiversity at risk to the effects of climate change (e.g., changes in boundaries of nature reserves to accommodate changes in geographical distribution of species, reducing non-CC related sources of stress on vulnerable ecosystems etc.); and
- 4. Together with the monitoring team, design a program to monitor the effects of climate change to be integrated into the monitoring program described under draft TOR 25.

#### Minimal Requirements:

The Climate Change Monitoring Expert should be a post-graduate professional with a degree in climate science and demonstrated field experience of a minimal 5 years in assessing the possible effects of climate change on natural ecosystems, preferably in forest ecosystem similar to those found in Huangshan.

#### Additional Requirements:

Language: Chinese (English would additionally be an advantage)

Headquarters: Huangshan, China

Duration: 10 person months throughout the 5 years of the Project.

Securing Biodiversity Conservation and Sustainable Use in Huangshan Municipality Project

#### **FAO-GEF-HSAC**

# 26. Draft Terms of Reference: Information Dissemination Specialist (national consultant)

#### Background and Tasks:

The 5-year Project represents a partnership among Huangshan Municipal Administrative Committee (HSAC), FAO and GEF. The Project seeks to secure the effective conservation and sustainable use of the biodiversity in the mountainous forest ecosystems of Huangshan Municipality. The project 's specific objective is to evaluate, adapt and implement relevant "best practices" derived from the successful management of Huangshan National Scenic Reserve to strengthen and upgrade the existing municipal system of Nature Reserves (NR). The experiences derived from this approach would in turn be used as a basis to develop and finalize a biodiversity conservation eco-tourism master plan for Huangshan Municipality's System of Nature Reserves relevant to other areas in China and abroad. To do this, a collaborative, proactive approach among the concerned municipal and provincial agencies, private sector and civil society will be needed supported by strategic, timely interventions provided by the Project to achieve maximum effectiveness and impact. A key objective of the project will be to develop experiences and lessons learned relevant to other nature reserves in both Anhui Province and elsewhere in China. To achieve that objective an effective information dissemination strategy will need to be developed and executed. Under the general supervision of HSAC's Bureau of Gardens and Forestry (BGF) and in close collaboration with the FAO Representative in China and the FAO Project Task Manager and Lead Technical officer, the Information Dissemination Specialist will be responsible for ensuring that this happens in an effective and lasting manner, he/she will have the following responsibilities and functions:

- 1. Review background and expected outputs generated by the project's four components throughout the life of the project and in particular the various media events supported under the project's public awareness sub-component;
- 2. Meet with other members of the project team and participate in a workshop with local experts to exchange ideas on cost-effective means to disseminate information to interested end users both in China and beyond;
- 3. Develop an information dissemination strategy that includes a work program, outputs, calendar and budget;
- 4. Coordinate the development and implementation of a webpage to provide information on project progress and outputs on a regular basis in Chinese with summaries in English. NRs participating in the project supported network activity should be integrated into the webpage activity and contribute articles on a regular basis.

#### **Minimal Requirements:**

The Information Dissemination Specialist should be a graduate professional, preferably with a degree in media, information management, computer information systems and/or related fields. He/she must have at least 5 years of experience as an information dissemination officer preferably associated with internationally funded projects. While not a requirement experience in environmental/natural resource projects would be beneficial. Chinese and English are requirements.

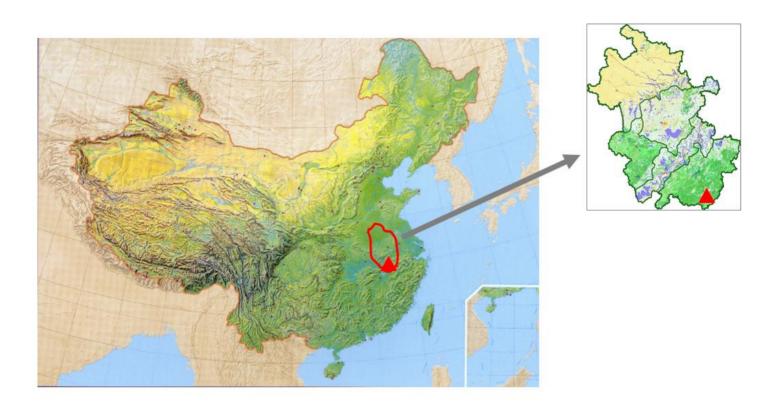
# Additional Requirements:

Language: Chinese and English Headquarters: Huangshan, China

Duration: person months throughout the 5 years of the Project. 5

# **APPENDIX 7. PROJECT MAPS**

Map 7a. China and Anhui Province



Note: Enlarged area shows Anhui Province, with red triangle indicating Huangshan Municipality.

