



Draft Design and Monitoring Framework

Project Number: 39321
May 2008

PRC: Proposed Loan and Global Environment Facility Grant for Shaanxi Qinling Biodiversity Conservation and Demonstration Project

A design and monitoring framework is an active document, progressively updated and revised as necessary, particularly following any changes in project design and implementation. In accordance with ADB's public communications policy (2005), it is disclosed before appraisal of the project or program. This draft framework may change during processing of the project or program, and the revised version will be disclosed as an appendix to the report and recommendation of the President.

Asian Development Bank

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanism	Assumptions and Risks
<p>Impact</p> <p>Sustainable biodiversity conservation to protect globally significant species and to sustain economic growth.</p>	<ul style="list-style-type: none"> • Land degradation and soil erosion arrested by 15% by 2020 in the mountainous area, the QBCDA. • Critical habitats covered by protected area, e.g., growth in protected area that successfully protects endangered and non-priority species. • Improved biodiversity management is demonstrated and adopted by all nature reserves in QM by 2020. • Increased rural incomes by 15%. 	<ul style="list-style-type: none"> • Monitoring reports of the Shaanxi Environmental Protection Bureau and PMO • Monitoring reports of Shaanxi forestry, agriculture, and other related bureaus • Annual reports of the Shaanxi Poverty Reduction Bureau • 11th and 12th Five-Year Plan evaluations • Government statistics on rural incomes, employment, and small businesses 	<p>Assumptions</p> <ul style="list-style-type: none"> • Project design implemented effectively. • Institutional arrangements to support commercial resorting of sustainable development are fully in place. <p>Risks</p> <ul style="list-style-type: none"> • Urban growth including influx of migrants, exceeds forecasts, and exerts more pressure on available infrastructure and on ecosystems. • Slower growth than anticipated in the PRC economy. • Weak and uncoordinated enforcement of environmental, land use, and related laws and regulations.
<p>Outcome</p> <p>Improved and integrated biodiversity management providing sustainable livelihoods for the population of the PA demonstrated to the rest of QM.</p>	<ul style="list-style-type: none"> • QNBG provides technical, scientific, and financial support for biodiversity conservation program in QBCDA by 2013. • SARC provides technical, scientific, and financial support for biodiversity conservation program in QBCDA by 2013. • Five globally-threatened species are protected through habitat regeneration and management by 2013. • Endangered and threatened species of Giant Panda, Golden Takin, Golden Monkey, Crested Ibis, Giant Salamander, Red Panda, Clouded Leopard, Brown-eared Pheasant, Manchurian Trout, Ginkgo Tree, Chinese Mountain Larch, One Flower Kingdonia, Mao-tai Maple, and Chinese Fir are monitored with numbers increasing by 2013. • Eco-tourism visitation increases from current 400,000 per year to 800,000 	<ul style="list-style-type: none"> • Biodiversity species data—baseline and annual monitoring data of the species in the in-situ area from environmental protection and forestry bureaus and the WWF • Shaanxi statistical yearbooks and data from county and townships • HH surveys including migration data • Visitation, occupancy, revenue, and other data from participating tourists attractions (ex-situ botanical garden, eco-lodges, etc.) • Government statistics • Project reports and monitoring 	<p>Assumptions</p> <ul style="list-style-type: none"> • Continued growth in demand for eco-tourism for biodiversity and religious and historical sites. • Infrastructure assets are properly constructed and maintained. • Supporting institutional and regulatory mechanisms and incentives are put in place for implementing a biodiversity management approach. • Voluntary resettlement from QM continues without major disputes. <p>Risks</p> <ul style="list-style-type: none"> • Improving the environment of QM is given lower priority in the future. • Insufficient enforcement and control systems. • Revenue is not shared equitably.

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	<p>by 2013, and 1.2 million by 2020.</p> <ul style="list-style-type: none"> • QNBG providing about 15% of profits to the biodiversity conservation program from 2012 onwards. • 7,000 ha of reforested land managed in the PA from 2012 onwards. • QBCDA poverty HH using national poverty definitions decline by 50% by 2013. • At least 20 small businesses developed within villages have increased incomes from transition to higher-value, and more sustainable rural industries by 2013. • Enterprise revenue increases from CNY62 million to CNY158 million by 2013 and CNY415 million by 2035. • 500 jobs for community members in conservation area by 2013. • About 900 jobs for community members in enterprises by 2013. • About 10,000 full-time job equivalents by 2013. 		
<p>Outputs Component 1: Participatory Biodiversity Management</p> <ol style="list-style-type: none"> 1. Demonstrating Conservation of Biodiversity 2. Improved village and forest-based livelihoods 	<ul style="list-style-type: none"> • 16 village development plans prepared including conservation forest and nature resources plans by 2010. • 5,000 ha of collective forests with certificates awarded to individual HHs, planted and maintained as conservation forests by 2010. • Habitat restoration plan prepared by 2010. • 2,000 ha of habitat management implemented on state forest land by 2013. • About 40 business development grants awarded by 2013. • About 10 home-stay eco-tourism enterprises started by 2012. • Up to 17.5 km of roads improved by 2011. • About 100 km of mountain pathways upgraded by 2013. • About 100 alternative energy (biogas) systems established 	<ul style="list-style-type: none"> • Project monitoring reports • Government statistics and poverty reduction office data • Eco-fund records • Enterprise accounts • Tourism and visitor numbers, gate ticket sales, and revenues • Field surveys for habitat and wildlife monitoring • Project benefit monitoring and evaluations 	<p>Assumptions</p> <ul style="list-style-type: none"> • PA is perceived as being representative for wider biodiversity conservation demonstration. • Improved livelihoods will result in better conservation and protection of natural resources and biodiversity. • Communities engage in commercial enterprises linked to eco-tourism, and natural resource processing. • Support from Government agencies and programs. <p>Risks</p> <ul style="list-style-type: none"> • Eco-tourism benefits less than projected. • Lack of management and quality control. • Conservation program is not implemented successfully.

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	<ul style="list-style-type: none"> by 2013. • About 100 HH water supplies improved by 2013. • Endangered animal species baseline data collected and management plans prepared by 2010. • Endangered animal species research contracts completed and reported by 2013. • Endangered animal species monitoring and reporting systems in place by 2013. 		
Component 2: Enhancing Biodiversity Conservation	<ul style="list-style-type: none"> • 269 ha botanical garden established with 18 formal gardens and walkways and supporting public education facilities by 2012. • About 870 jobs created for community members in the enterprises by 2013. • 18 Daoist sites restored by 2012. • One cable car constructed by 2011. • QNBG revenue increasing from CNY30 million to CNY65 million by 2013. • QNBG investing about 15% of its profits into QBCDA by 2012. • SARC extended and refurbished with extensive enclosures with satellite areas for Crested Ibis, Giant Panda, and Golden Monkey by 2013. • Upgraded exhibit area and support service for SARC by 2013. • 90% of wastewater generated is properly treated and disposed of. 	<ul style="list-style-type: none"> • Site inspection and project implementation reports • Enterprise financial accounts • Project monitoring and reporting via PMO • Procurement records • Wastewater and solid waste system data (rate of capacity utilization and influent and effluent flow volumes). Water supply data (rate of utilization and flow volumes) • Water quality monitoring program data including monitoring wells around Louguantai • ADB review missions • HH surveys • Annual reports of the EA to ADB • Satellite imagery for changes in land use, forest cover, etc. 	<p>Assumptions</p> <ul style="list-style-type: none"> • Timely completion of infrastructure. • Shaanxi Environmental Protection Bureau enforces environmental monitoring standards. • Effective stakeholder participation and ownership developed. • Activities and construction of facilities will fully engage and respect the Daoist culture. • Appropriate portion of eco-tourism revenues and profits are invested in QBCDA and QM. <p>Risks</p> <ul style="list-style-type: none"> • Invasive species introduced to QM. • Disease and pandemic risks to captive species. • Loss of well-being for rural residents.
Component 3: Project Management <ol style="list-style-type: none"> 1. Strengthening PMO and IA 2. Institutional strengthening 3. Conservation dissemination program 	<ul style="list-style-type: none"> • Project disbursement ratio targets achieved 85% of the time by 2013. • Annual work planning and evaluation achievements from 2009 onwards. • Policy and legal studies completed and proposed actions/reforms submitted to the Provincial Peoples Committee by 2013. • Sustainable financing 	<ul style="list-style-type: none"> • QM management forum minutes and plan • Habitat restoration and management plan for QM • Project monitoring data and WWF monitoring data sets and reports • PMO records on project activities and evaluations • Project records and outreach programs 	<p>Assumptions</p> <ul style="list-style-type: none"> • Businesses benefit from wider conservation programs. • QM program considers PA as representative and relevant. • Replication of institutional models is linked to QBCDA programs.

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	<p>program for QNBG operating by 2010.</p> <ul style="list-style-type: none"> • Eco-tourism master plan completed as part of the habitat management plan by 2010. • Conservation monitoring unit established and equipped by 2010. • Monitoring program designed and agreed with training provided to all stakeholders by 2010. • Research contracts awarded and completed by 2011. • Integrated landscape habitat management plan completed with action planning and capacity building by 2012. • Data collated for the PA, remote sensing analysis completed and stored with operational database accessible to staff by 2012. • Public education and awareness program implemented by 2012. • Professional job exchanges conducted by 2013. 	<ul style="list-style-type: none"> • PA plans • Business records • Training program evaluation records 	<p>Risks</p> <ul style="list-style-type: none"> • Weak coordination of the EA, IA, and PMO. • Resistance by some stakeholders. • Eco-tourism facilities not fully commercialized and therefore not able to repay loan and generate surplus to support biodiversity conservation.
Activities with Milestones			Inputs: (\$ million)
Component 1: Participatory Biodiversity Management			ADB Loan 40.00
1.1 Demonstrating Conservation of Biodiversity			GEF Grant 4.27
Activity (1)	Habitat restoration completed for 2,000 ha by 2012.		SPG 89.00
Activity (2)	Endangered species management plan for five species by 2012 based on field research contracts.		Total Financing 133.27
1.2 Improved Village and Forest-based Livelihoods			Civil Works 68.78
Activity (3)	Complete 16 village development plans by 2010.		Equipment 8.26
Activity (4)	Conservation forestry planting on 5,000 ha by 2012.		Vehicles 0.65
Activity (5)	Small business development grants awarded, home-stay eco-tourism operators selected and operational, road improvement programs and pathways upgraded, and grants awarded for social infrastructure by 2012.		Materials 5.11
Component 2: Enhancing Biodiversity Conservation			Reception/Display Area 6.58
2.1 Construction of QNBG botanical garden, exhibition and research buildings, nursery, temple restoration, access roads, cable car, and SARC improvements.			Training 1.20
Activity (6)	Establish specialized gardens by end of 2010.		Surveys 7.21
Activity (7)	Complete the greenhouse development, paleontology museum, Daoist historic sites, and other civil works and infrastructure by end 2009.		Resettlement Costs 6.73
Activity (8)	Complete the cableway, procure office and vehicles, and complete training programs by end of 2010.		Design/Supervision Costs 4.02
Activity (9)	Initial resettlement process to be completed by end of 2008 with process completed by end of 2012.		Consulting Services 1.11
Activity (10)	Design input completed by end of 2008, marketing and education to be completed by end of 2012.		Staff Costs 0.46
Activity (11)	Animal exposition area upgraded to international standards by 2010, Crested Ibis breeding base completed by 2009, Giant Panda breeding base completed by 2010, and Golden Monkey base concluded by 2011.		Total Investment Costs 110.11
			Total Recurrent Costs 18.36
			Total Base Costs 128.47
			Financing Charges 4.80
			Total Costs 133.27

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<p>Component 3: Project Management</p> <p>3.1 Strengthening PMO</p> <p>Activity (12) Establish and staff PMO by end of first 6 months of the Project with agreed work plans, procurement plans, and training plans.</p> <p>Activity (13) Contracting of resettlement monitoring before loan effectiveness, and project benefit monitoring and evaluation system by 2008.</p> <p>3.2 Institutional Strengthening</p> <p>Activity (14) Propose options for improved management of the income-generating facilities and biodiversity conservation activities for sustainable management of project facilities by 2011.</p> <p>3.3 Conservation Dissemination Program</p> <p>Activity (15) Establish a conservation monitoring center by 2008, and design, implement, and evaluate a conservation monitoring program as part of a QM-wide capacity building and awareness program by 2010.</p> <p>Activity (16) Develop and implement a communication and awareness program for disseminating the project's lessons by 2010.</p> <p>Activity (17) Complete the preparation of a PA master plan by developing and applying a biodiversity conservation and planning model by 2011.</p>			

ADB = Asian Development Bank, CNY = yuan, EA = executing agency, GEF = Global Environment Facility, ha = hectare, HH = household, IA = implementing agency, km = kilometer, PA = project area, PMO = project management office, PRC = People's Republic of China, PY = project year, QBCDA = Qinling Biological Conservation and Demonstration Area, QM = Qinling Mountains, QNBG = Qinling National Botanical Garden, SARC = Shaanxi Animal Reserve Center, SPG = Shaanxi Provincial Government, WWF = World Wildlife Fund.