THE WORLD BANK/IFC/M.I.G.A.

OFFICE MEMORANDUM

DATE: November 11, 1999

TO: See Distribution Below

FROM: Lars Vidaeus, GEF Executive Coordinator

EXTENSION: 34188

SUBJECT: China: Lake Dianchi Aquatic Biodiversity Restoration Project - PDF Block A

Request

Please find attached a PDF Block A for the above-mentioned project. We would appreciate your comments by November 18, 1999. Thank you.

Distribution for Comments

R. Asenjo, UNDP

A. Djoghlaf, UNEP (Nairobi)

R. Khanna, UNEP (Washington)

cc (for information only):

Messrs./Mmes: K. King, GEF Program Coordination, (GEFSEC);

M. Gadgil, STAP; M. Griffith, STAP (Nairobi);

Broadfield (EASES); Aryal, Esumei, Mackinnon, Towsey (ENV);

ENVGC ISC, IRIS2

GEF MEDIUM-SIZED PROJECT PROPOSAL PDF BLOCK A REQUEST

PART I – ELIGIBILITY	
1. Project name : Lake Dianchi Aquatic Biodiversity Restoration Project	2. Proposed GEF Implementing Agency: The World Bank
3. Country or countries in which the project is being implemented: People's Republic of China	4. Country eligibility: China ratified the Biodiversity Convention on May 1, 1993
5. GEF focal area(s): Biodiversity	6. Operational program/Short-term measure: OP# - Freshwater Ecosystems

- 7. Project linkage to national priorities, action plans, and programs: The work proposed is in line with many of the priorities of the 1994 China Biodiversity Conservation Action Plan although, as in keeping with many similar documents at that time, the threats to and conservation of freshwater biodiversity are not specifically identified as issues. Some of the endemic fishes are listed as Priority Species in the Action Plan.
- 8. Status of national operational focal point review (dates): Submitted: October 24, 1998 Endorsed: October 25, 1999
- 9. **Project rationale and objectives**: The Lake Dianchi basin was, and probably still is, a 'hot spot' of freshwater biodiversity. It originally had 24 indigenous fish species, 10 of which were endemic, as well as endemic species of mollusks and crustaceans. Since the 1950s some 31 fish species have been introduced to the lake, although not all of these have persisted. Declining water quality, loss of natural habitats, competition for food and living space, increased fishing effort, and possibly introduced diseases and parasites have combined to threaten the indigenous fauna, resulting in the apparent extinction of at least some endemic species. Surveys since 1994 indicate that at least four endemics and five other indigenous species are still extant, but it should be noted that surveys of the type and intensity likely to give an accurate picture of the endemics' distribution and status have not yet been conducted.

The principal cause of degradation of Lake Dianchi (as elsewhere in China) is the lack of effective control of polluting discharges to water courses. Kunming, capital of Yunnan Province, lies at the northern end of the lake and its water resources are threatened in terms of both quality (high levels of phosphorus and nitrogen) and quantity. The Yunnan Environment Project (YEP) (1996-2002) which has total costs of \$300 million is supported by a World Bank loan of \$200 million, and will improve water quality in the lake through the Dianchi Environmental Action Plan involving sewerage and water treatment works, solid waste management, basin management, industrial pollution control, environmental management and monitoring, institutional development and training. About \$200 million (\$100 million from each PRC and World Bank) is going towards work that will directly improve lake conditions and address major root causes of biodiversity loss. Now that this foundation is in place it is possible to give attention to other environmental aspects. In mid-1996 the World Bank instigated a brief study of the baseline conditions of the lake funded by UK-ODA. The resulting proposals on means of improving the Lake's biological environment and on how biological processes could support the objectives of the YEP are supported by the Yunnan Provincial Government, and now need to be implemented.

The proposed project aims to properly survey and monitor the biological environment of the

Lake and its tributaries on a periodic basis to monitor lake quality improvements, increase the chances of survival of the remaining endemic species of Lake Dianchi and its tributaries by providing breeding habitat, facilitating further improvements to water quality, and promoting greater awareness of the plight of the endemic and other indigenous species.

- 10. **Expected outcomes**: a) The conservation of a community of severely range-restricted species; (b) A demonstration of the utility of restoration for freshwater biodiversity conservation; (c) The innovative use of biological indicator species for pollution monitoring; (d) A greater awareness locally, nationally and globally of threats, challenges and opportunities related to Lake Dianchi in particular and freshwater biodiversity in general; (e) Increased capacity to survey and identify freshwater biodiversity.
- 11. Planned activities to achieve outcomes: Surveys and monitoring: Since past surveys of water quality and biodiversity in Lake Dianchi have been irregular and inconsistent in their objectives, methodology, timing and intensity, the systematic biological surveys and monitoring will provide a sound basis for the management of the various existing and potential freshwater habitats, and will complement the water quality monitoring under the YEP. The 1996 report made it clear that future monitoring must not be restricted to the lake but must encompass the basin as a whole. Wetland management and restoration: There is a need for wetland restoration and management of the lake's populations of large native bivalve mollusks with the expectation of thereby improving water clarity and improving conditions for macrophyte growth due to their filter-feeding habits. A locally-funded project to restore macrophytes in one area of the lake will provide guidance for the proposed further work. Conservation: For successful conservation of the globally significant species there will be interactions and discussions with the relevant authorities (notably the Lake Dianchi Management Department of Kunming Municipality) regarding affording certain of the native/endemic species or areas official protected status, and instigating conservation management actions. Awareness building: Brochures, posters, leaflets etc. in Chinese and English will be distributed to explain the biological interest of Lake Dianchi, the individual endemic species of interest, the changes of the last few decades, and the on-going work aimed at improving the situation.
- 12. **Stakeholders involved in project**: Kunming Institute of Zoology (Chinese Academy of Sciences), Southwest China Forestry College, Yunnan Environment Institute, Lake Dianchi Management Department of Kunming Municipality, Yunnan Environment Project (Loan 4055-CHA/Cr. 2892-CHA)

PART II – INFORMATION ON BLOCK A PDF ACTIVITIES

- 13. Activities to be financed by the PDF:
- 1. Review and inventory of current and recent activities and plans relevant to the biodiversity of Lake Dianchi and it immediate surroundings
- 2. Assessment of the needs to restore native biodiversity to the lake and tributaries, especially the endemic species
- 3. Participatory discussions with stakeholders (fishermen, farmers, government agencies, academic institutions) about uses, constraints, potential conflicts
- 4. Workshop in Kunming to review the proposed project in the context of other activities and plans
- 5. Identify inputs necessary to project success and to sources of finance for elements not eligible for GEF financing.

- 6. Prepare the project brief with detailed log frame.
- 14. **Expected outputs and completion dates**: Completed project proposal as required (including logical framework, workplan and terms of reference) within 5 months.
- 15. Other possible contributors/donors and amounts:

Additional financial support can be expected from the Kunming Institute of Zoology and from the Applied and Basic Science Research Foundation of Yunnan Province.

16. Total budget and information on how costs will be met (including the Block A grant): GEF: \$525,000 (including Block A grant)

Co-financing for water quality improvements: Yunnan Environment Project: World Bank (IBRD) \$100 million, Peoples' Republic of China \$100 million

TOTAL: \$200,525,000

Budget for Block A grant:

	Total	GEF	KIZ
International specialist (fees, travel, subsistence)	12000	12000	
National specialists	3000	2500	500
Local travel and subsistence costs	2000	2000	
Costs of meetings and consultations	2000	2000	
Stakeholder project planning workshop	2000	2000	
Translation, report production and printing	500	500	
Administration and communication costs	2000	1500	500
Office facilities	1500	1000	1500
TOTAL	25000	22500	2500
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PART III – INFORMATION ON THE APPLICANT INSTITUTION

- 17. Name: The Kunming Institute of Zoology of the Chinese Academy of Sciences
- 18. Date of establishment, membership, and leadership: 1959. The Institute has a staff of 160 scientists, and most of the younger scientists have undergone long-term training in Europe or North America. Director Dr. Wei-Zhi Ji.
- 19. **Mandate/terms of reference**: The institute is to conservation biology, primatology and evolutionary biology, especially in southern China and to maintain and continue to build the largest specimen collections in southwestern China.
- 20. Sources of revenue: KIZ has obtained a large grant (\$6 million) from Chinese Academy of Sciences to enforce its research in biodiversity and conservation and to reconstruct public education. It has also received grants from WWF, MacArthur Foundation, and the Asian Development Bank.
- 21. Recent activities/programs, in particular those relevant to the GEF: A renewable long-term project (Biodiversity Survey to Yunnan-Myanmar Boundary Area) is initiated by California Academy of Sciences and Kunming Institute of Zoology, promised to be granted (\$2 million) by National Science Foundation of America. The project on the conservation and feasibility assessment of the Grand River National Park in northwestern Yunnan has been initiated by KIZ and relevant institutions, being granted GTZ (Germany) and TNC (The Nature Conservancy, America).

PART IV - INFORMATION TO BE COMPLETED BY IMPLEMENTING AGENCY

- 22. Project identification number: P068239
- 23. **Implementing Agency contact person**: Tony Whitten, Senior Biodiversity Specialist, East Asia and Pacific Environment and Social Development Unit, The World Bank, 1818 H St NW, Washington DC 20433, USA, twhitten@worldbank.org, fax 1-202-522-1666, ph. 1-202-458-2253
- 24. **Project linkage to Implementing Agency program(s):** The large Bank-financed Yunnan Environment Project is working to improve water quality for Kunming City through water treatment and other means and this will have long term benefits for Lake Dianchi. The proposed project will capitalize upon the imminent improvements to promote the restoration of the lake's endemic biodiversity.

INTERNATIONAL DEPARTMENT MINISTRY OF FINANCE

Sanlihe, Xicheng District
Beijing 100820 People's Republic of China

MOF

中华人民共和国财政部 国际 司

中国北京三里河南三巷3号100820

October 12, 1999

Ms.Christalina Georgieva
Sector Director
Environmental and social Development
East Asia and Pacific Region
The World Bank
Fax: (1-202) 0522 1666

China: Endorsement Letter for GEF Support

Medium-Sized Project for Lake Dianchi Aquatic Biodiversity Restoration

Dear Ms. Georgieva,

This is to advise you that Ministry of Finance, as the GEF Focal Point for China, would like to endorse the captioned concept paper to be submitted by the Financial Bureau of Yunnan Province, with the cooperation with World Bank for GEF support.

The biodiversity conservation and sustainable management of aquatic biodiverdity is an important part of implementing the UN convention on biological diversity (CBD). The Lake Dianchi has great significance to its unique local fresh water fish species and some special aquatic species, which have been classified as priority in the 1994 China Biodiversity Conservation Action Plan. Therefore, the proposed project, with the objective to sustainably conserve and manage the biodiversity in Dianchi Lake, will have global significance to biodiversity conservation, especially the aquatic biodiversity.

For detail and technical issues, please contact:

Mr. Dong Gang,

Director of Foreign Economic Division,

Yunnan Provincial Bureau of Finance,

Tel: (86) 871 3626 414 Fax: (86) 871 3627 430

E-mail: hyw111@ynmail.com

I would like to take this opportunity to thank you for all your efforts in the proposed project.

Best regards.

Lake Dianchi Aquatic Biodiversity Restoration Project GEF Focal Point Endorsement Letter

Sincerely yours,

(Jinlin Yang)
Operational Focal Point for China

CC:

Mr. Yukon Huang

Director, China County Unit The world Bank Fax: (86-10) 6554 1686

Mr. Chen Huan

Advisor to the Executive Director for China The World Bank Fax: (1-202) 522 1579

Mr. Luo Gaolai

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Deputy Director-General Yunnan Provincial Bureau of Finance Fax:(86-871) 3627430