

ASIAN DEVELOPMENT BANK

TAR: PRC 34474

TECHNICAL ASSISTANCE

TO THE

PEOPLE'S REPUBLIC OF CHINA

FOR THE

PRC-GEF PARTNERSHIP ON LAND DEGRADATION

IN DRYLAND ECOSYSTEMS

May 2001

CURRENCY EQUIVALENTS

(as of 30 April 2001)

Currency Unit	–	Yuan (Y)
\$1.00	=	Y8.27
Y1.00	=	\$0.1209

ABBREVIATIONS

ADB	–	Asian Development Bank
CBD	–	Convention on Biological Diversity
CCD	–	Convention to Combat Desertification
CCD-NAP	–	National Action Plan to Combat Desertification
CCICCD	–	Chinese Committee for Implementation of the Convention to Combat Desertification
CPF	–	country programming framework
GEF	–	Global Environment Facility
M&E	–	monitoring and evaluation
MOA	–	Ministry of Agriculture
MOF	–	Ministry of Finance
MWR	–	Ministry of Water Resources
OP12	–	operational program of GEF on integrated ecosystem management
PDF-B	–	Project Development Facility – Block B
PRC	–	People's Republic of China
SDPC	–	State Development Planning Commission
SEPA	–	State Environment Protection Administration
SFA	–	State Forestry Administration
TA	–	technical assistance
UN	–	United Nations
WDS	–	western development strategy

WEIGHTS AND MEASURES

ha (hectare)	–	10,000 m ²
km (kilometer)	–	1,000 m
km ² (square kilometer)	–	100 ha
t (tons)	–	1,000 kg

NOTES

- (i) The fiscal year (FY) of the Government ends on 31 December.
- (ii) In this report, "\$" refers to US dollars.

I. INTRODUCTION

1. The Government of the People's Republic of China (PRC) requested the Asian Development Bank (ADB) to take a lead role in preparing a PRC-GEF Partnership on Land Degradation in Dryland Ecosystems, under Operational Program (OP) 12 on Integrated Ecosystem Management. The advisory technical assistance (TA) will build on consultations and exploratory work undertaken in the context of TA 3497-PRC, a small-scale TA (SSTA) carried out from November 2000 to March 2001.¹ The Global Environment Facility (GEF) secretariat approved the advisory TA and a Project Development Facility – Block B (PDF-B) grant of \$350,000 on 28 March 2001. To match these funds, the Government requested ADB to provide TA for development of the Partnership. This report is based on an ADB Fact-Finding Mission that visited the PRC 26 March–4 April 2001 to confirm with the Government the objectives, scope, cost estimates, financing plan, and implementation arrangements of the TA.²

II. BACKGROUND AND RATIONALE

2. In March 2000, the Government endorsed the western development strategy (WDS) to promote growth and development in western PRC.³ The strategy emphasizes two main objectives: (i) reduce economic disparities between the western region and other regions, and (ii) ensure sustainable natural resources management.⁴ A significant factor leading to deterioration of the environment and ecosystems in the western region is land degradation. Land degradation affects most provinces, while desertification is concentrated in the northern, northeastern, and northwestern regions (the three north regions) lying in the arid, semiarid, and dry subhumid zones.⁵ Annual soil loss is estimated at 5 billion tons (t). Dust storms affect a wide area including Beijing. Economic damage is difficult to estimate,⁶ but the annual loss is substantial, including loss of arable and grazing land, destruction of roads and other infrastructure, loss of reservoir storage capacity, and impacts of dust storms in urban areas.

3. Much of the current land degradation is due to poor land use decisions over a long period of time, rather than climate changes or other natural factors. In the PRC, the arable land per capita is 0.11 hectare (ha). The shrinking arable land area and increasing demand for agricultural products pressure farmers to extract higher yields from their land, at the expense of stable soil structure and adequate organic matter content, thus leading to increased soil erosion.⁷ There is a clear connection between land degradation and poverty. Almost 90 percent of rural people living in poverty are located in areas suffering from soil erosion. In the arid areas, rapidly increasing livestock numbers exacerbate the spread of deserts. Over 90 percent of the

1 TA 3497-PRC: *GEF Partnership on Land Degradation in Dryland Ecosystems*, for \$100,000, approved on 5 September 2000.

2 The TA first appeared in the Internet version of *ADB Business Opportunities* on 15 March 2001.

3 The western region covers 12 provinces, an area of 5.4 million square kilometers (km²) (57 percent of the country) and 285 million residents (23.7 percent of PRC's population).

4 TA 3468-PRC: *Policy Support for PRC 2020 Project (Phase III)*, for \$900,000, approved on 14 July 2000, is assisting the Government in relation to WDS.

5 The Convention to Combat Desertification (CCD) defines desertification as "land degradation in arid, semi-arid, and dry subhumid areas resulting from various factors, including climatic variations and human activities." The predominant factor causing the advance of desert fronts is wind erosion, although the actual causes of desertification are numerous.

6 Ning Datong (undated). *An Assessment of the Economic Losses Resulting from Land Degradation in China*, estimated ¥59.3 billion (\$7.1 billion) per year, with 24.3 percent from lost farmland, 27.3 percent from nutrients lost in runoff, 42.2 percent in reduced reservoir functions, 5.4 percent from disrupted shipping, and 0.8 percent from salinized soil.

7 TA 1615-PRC: *Monitoring and Management of Fragile Ecosystems in Shanxi-Shaanxi-Inner Mongolia*, for \$600,000, approved on 27 November 1991.

1.3 million square kilometers (km²) of grasslands suffer from moderate to severe degradation, while demand for meat and other livestock products is rising as urbanization and standards of living increase throughout the PRC.

4. Western PRC is rich in biodiversity and supports both Palearctic species and those representative of more subtropical southern latitudes. The arid and semiarid zones contain no less than 5,000 recorded species of plants and animals, including numerous endemics. Many of these species are endangered elsewhere in their range and threatened globally. Many plant species, including over 220 medicinal plants and herbs, grasses, and fruits are useful to humans. Western PRC has 9 of the world's 238 ecoregions considered as priority regions for global conservation action.⁸ They harbor outstanding and representative examples of the world's ecosystems, which the PRC is committed to protect under the Convention on Biological Diversity (CBD).

5. An institutional framework exists to coordinate the activities of 17 ministries and state commissions associated with efforts to combat land degradation in western PRC.⁹ To meet PRC's obligations under the United Nations Convention to Combat Desertification (CCD), the China National Committee for the Implementation of the Convention to Combat Desertification (CCICCD) is serviced by a secretariat and the National Bureau to Combat Desertification, housed in the State Forestry Administration (SFA). The China National Desertification Monitoring Centre, the China National Training Centre for Combating Desertification, and the China National Research and Development Centre for Combating Desertification were set up in 1996. The CCICCD has a mandate to (i) coordinate the work of various sectors combating land degradation, (ii) develop medium and long-term action strategies, (iii) prioritize financial resources, (iv) approve the guidelines and policies for implementing the CCD, and (v) review local area development plans submitted by various levels of governments.

6. Under the CCICCD, a National Action Program to Combat Desertification (CCD-NAP) was drafted.¹⁰ It focuses on 265 priority counties in western PRC. The draft CCD-NAP spreads implementation over three phases: 2001-2010, 2011-2030, and 2031-2050. A key objective of CCD-NAP in the first phase is to manage 22 million ha of degraded land by 2010. A blue book of investment programs, submitted in 2000 by provincial authorities to the CCICCD for consideration and support by prospective development partners, lists 24 projects covering priority areas, with a total budget of \$1.26 billion.

7. Deficiencies in the CCD-NAP process and the existing institutional arrangements include (i) failure to mainstream CCD objectives within development strategies and ensure policy coordination across sectors; (ii) a focus on activities mainly within the jurisdiction of SFA, such as revegetating desert margins and planting shelterbelts, rather than providing an integrating framework for plans and programs of all relevant ministries; (iii) undue emphasis on achievement of top-down targets and technical solutions; (iv) insufficient coordination among

8 These are the Altai-Sayan Montane Forests, Middle Asian Mountains Temperate Forests and Steppe, Central China Temperate Forests, Eastern Himalayan Broadleaf and Conifer Forests, Eastern Himalayan Alpine Meadows, Tibetan Stepp, Daurian Steppe, Mekong and Salween River System, and the Yangtze River and Lakes system.

9 State Forestry Administration, Ministry of Foreign Affairs, State Planning and Development Commission, Ministry of Science and Technology, Ministry of Finance, Ministry of Railway, Ministry of Communication, Ministry of National Territory and Natural Resources, State Environmental Protection Administration, Ministry of Agriculture, Ministry of Water Resources, People's Bank of China, Chinese Academy of Sciences, State Commission of Foreign Trade, Leading Group on Poverty, State Integrated Agricultural Development Bureau, and State Taxation Supervision Bureau.

10 CCICCD. April 2000. China National Report on the Implementation of the UNCCD and National Action Program to Combat Desertification.

line agencies; and (v) lack of sufficient attention to creating an enabling environment for improved resource management by resource users. In addition, opportunities have been missed to achieve synergies among land degradation control, biodiversity conservation, and climate change mitigation that could be realized through integrated ecosystem management approaches. As a result of these deficiencies, the CCD-NAP does not yet provide an adequate framework for resolving inconsistencies and policy conflicts arising from sectoral plans.

8. The Government has requested ADB to assist in formulating the PRC/GEF Partnership and in preparing a multisource, multisectoral country programming framework (CPF) to foster an enabling environment for integrated ecosystem management in the western region. The SSTA completed in March 2001 prepared the GEF proposal for PDF-B funding and facilitated collection of background information, coordination of all relevant government agencies, and the start of aid agency coordination. During preliminary discussions under the SSTA, the Government and ADB agreed that the PRC-GEF Partnership should (i) tackle land degradation issues through an integrated, participatory, and cross-sectoral approach aimed at the root causes of land degradation, and avoid the pursuit of inherently conflicting policies; (ii) evolve effective mechanisms to coordinate the legal/regulatory framework, policies, programs, and actions by various sectoral agencies and aid agencies operating in the areas of agricultural and rural development, land, forestry and water management, environmental protection, and finance and planning; and (iii) introduce appropriate and transparent monitoring and evaluation systems to ensure efficient use of funds and assess the outcomes and impact of efforts to combat land degradation.

III. THE TECHNICAL ASSISTANCE

A. Objectives

9. The PRC/GEF Partnership Program seeks to (i) combat land degradation and reduce poverty in selected ecoregions of national and global significance; (ii) achieve global environmental benefits through conservation of biodiversity and carbon sequestration; and (iii) generate lessons on policies, institutional arrangements, and approaches for integrated ecosystem management for widespread replication (Appendix 1). The TA will prepare, in accordance with the GEF guidelines on the programmed approach (and in combination with a PDF-B grant from GEF11), (i) the CPF outlining the policy matrix, priority investment programs in selected ecoregions, and commitments among partners; (ii) the supporting GEF project brief; and (iii) prefeasibility level assessments of suitable high-priority investments for combined ADB/GEF/aid agency support.

B. Scope

10. The PRC/GEF Partnership will act as a mechanism to supervise on the WDS the provisions of the CCD as outlined in the CCD-NAP and related plans, the CBD as outlined in the Biodiversity Conservation Action Plan, and PRC's commitment to the United Nations Framework Convention on Climate Change (UNFCCC).¹² The TA will be conducted in two phases. Phase 1 includes (i) preparing an overview of issues to be considered in formulating a CPF, and recommendations for harmonizing laws and policies; (ii) assessing the mandates, roles, responsibilities, and programs of the Ministry of Agriculture (MOA), Ministry of Finance

11 The GEF PDF-B grant of \$350,000 was approved by the GEF secretariat on 28 March 2001.

12 The PRC ratified the UNFCCC on 5 January 1993, the Convention on Biological Diversity on 5 January 1993, and the CCD on 18 February 1997. In addition, the PRC ratified the Ramsar Convention in 1992.

(MOF), Ministry of Water Resources (MWR), State Environment Protection Administration (SEPA), SFA, and State Development Planning Commission (SDPC), among others, then formulating recommendations for institutional strengthening and capacity building, eliminating conflicting and/or overlapping responsibilities, introducing bottom-up consultative and participatory processes involving civil society, and integrating sectoral agencies in formulating and implementing projects for integrated ecosystem management; (iii) compiling biodiversity information for western PRC; (iv) assessing the carbon sequestration potential of western PRC; (v) identifying suitable dryland ecoregions as suitable sites for project interventions under the PRC-GEF Partnership; (vi) identifying and screening priority packages of investments and TA as a sequenced program of interventions to be supported by the PRC-GEF Partnership; (vii) compiling a profile of the social issues to be considered in the CPF, and formulating recommendations for incorporating public participation processes and social improvement strategies; (viii) describing biophysical and socioeconomic indicators needed to monitor changes in the ecological environment, biodiversity status, extent and severity of land degradation, condition of water resources, and social well-being; (ix) preparing a design for a monitoring and evaluation system to monitor achievement of program objectives; (x) consultations, workshops, awareness creation, consensus building, and participatory project development; and (xi) preparing a CPF and project brief.

11. In phase 2, prefeasibility-level analysis will be undertaken for high-priority investment projects, for which possible ADB/GEF/aid agency financing is envisaged, to assess financial viability, socioeconomic benefits, environmental impacts, potential for cost recovery, and poverty reduction benefits. This phase will also assist future executing agencies to prepare preliminary project proposals for external financing to be considered by SDPC and MOF. A study tour of community-based land degradation control programs, such as LandCare in Australia, will help to broaden the programmed approach.

C. Cost Estimates and Financing Plan

12. The TA is estimated to cost \$1,440,000 equivalent, comprising \$695,000 in foreign exchange cost and \$745,000 equivalent in local currency cost. ADB will finance \$800,000 equivalent to cover \$475,000 of the foreign exchange cost of \$695,000 plus \$325,000 equivalent of the local currency cost. The TA will be financed on a grant basis from the ADB-funded TA Program. Under ADB's direct administration, GEF has approved a PDF-B grant of \$350,000 equivalent to cover \$220,000 of the foreign exchange cost and \$130,000 equivalent of the local currency cost. The Government will finance the remaining local currency cost of \$290,000 equivalent. Government financing will cover remuneration and per diem of counterpart staff, office accommodation and supplies, local inland travel costs, local communications and reports, and surveys, investigations and plans to be carried out by local design institutes during the course of the study. The cost estimates and financing plan are given in Appendix 2. The Government has been informed that approval of the TA does not commit ADB to finance any ensuing project.

D. Implementation Arrangements

13. The Government has recognized the need for an integrated ecosystem management approach to land degradation in western PRC. This approach will require overcoming the following institutional barriers: (i) lack of policy-relevant data to guide integrated and cross-sectoral planning for ecosystem management; (ii) absence of capacity to develop incentives for adopting sustainable management practices; (iii) lack of regional planning policies that align spatial patterns of human settlements and development activities with requisites of ecosystem

management, and reduce pressure on ecologically fragile or vulnerable areas; and (iv) limited institutional capacity to formulate and implement integrated approaches, and constraints to involving existing technical capacity in the planning process.

14. In view of these institutional barriers, a national steering committee was set up comprising SFA, MOF, SEPA, MWR, Leading Group on Poverty, SDPC, and MOA, chaired by MOF and co-chaired by SFA.¹³ The Executing Agency will be MOF (specifically under the oversight of the GEF Focal Point), while day-to-day administration will be delegated to a Program Management Office (PMO), located within SFA, but staffed by seconded personnel from several line agencies. Counterpart staff in the PMO will be expected to perform as part of the overall TA team. SFA is responsible for coordinating the implementation of PRC's commitments to the United Nations CCD and, through its provincial offices, manages about 800 of PRC's nature reserves (the key repositories of the nation's biodiversity). The TA will strengthen SFA's capacity to implement integrated ecosystem management.

15. The TA will require 65 person-months of consulting services: 50 domestic and 15 international. The consultants, to be engaged through a firm, will be selected by ADB in accordance with ADB's *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for recruiting domestic consultants.¹⁴ In view of the need to maintain continuity between completion of the SSTA and to meet the May 2002 deadline for submission of the CPF, advance action will be adopted to recruit consultants on a noncommittal basis. The international consultants will have expertise in natural resource management, biodiversity, carbon sequestration/climate change, land use planning, and economics. The domestic consultants will have expertise in natural resource planning, remote sensing/geographic information systems, social sciences, public expenditure, erosion control, grassland management, wildlife ecology, plant biodiversity, forestry, meteorology/climate change, public participation, and economic planning and appraisal. The terms of reference are in Appendix 3. The TA will be implemented over 12 months, and is expected to commence in July 2001 (Appendix 4). Following ADB's *Guidelines for Procurement*, the consultants will procure equipment and software, arrange for the study tour, commission research papers, and assume conference expenses and other miscellaneous costs.

IV. THE PRESIDENT'S DECISION

16. The President, acting under the authority delegated by the Board, has approved (i) ADB administering a portion of the technical assistance to be financed by the Global Environment Facility, on a grant basis, in an amount not exceeding the equivalent of \$350,000, and (ii) the provision of technical assistance to be financed by ADB on a grant basis, in an amount not exceeding the equivalent of \$800,000, both to the Government of the People's Republic of China for the purpose of preparing a PRC-GEF Partnership on Land Degradation in Dryland Ecosystems, and hereby reports such action to the Board.

¹³ Additional agencies (such as the Leading Group on WDS under State Council) may be included in the steering committee during implementation.

¹⁴ The methodology and terms of reference of the consulting services are specific and clearly identified. Hence, ADB's procedure for simplified technical proposals will be used to select the consultants (*Project Administration Instructions, 3.01, paras. 41-42, 1 July 1996*).

TECHNICAL ASSISTANCE FRAMEWORK

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p>Goal Combat land degradation and reduce poverty in selected ecosystems of national and global significance</p>	<p>Integrated ecosystem management effectively mainstreamed into the western development strategy (WDS)</p>	<p>Policy statements of Leading Group on WDS, central and provincial government agencies</p>	<p>Consensus on the definition of integrated ecosystem management and its role in the WDS</p> <p>Willingness to mainstream environmental considerations into economic development</p>
<p>Purpose Prepare a country programming framework (CPF) for the PRC-GEF Partnership on Land Degradation, a draft project brief for submission to GEF, and conduct pre-feasibility-level studies for high priority investments</p>	<p>Endorsement of the CPF by Government, multilateral and bilateral agencies, and civil society Approval of the CPF by GEF Council, in accordance with GEF Operational Program 12 on integrated ecosystem management</p>	<p>Presentation to State Council, minutes of aid agency coordination group, and GEF Council decision</p>	<p>Relevant line agencies and funding agencies will be prepared to coordinate their activities under the CPF.</p> <p>GEF will have adequate funding to commit to the Partnership for a 10-year period</p>
<p>Outputs 1. Recommended revisions to strategy plans, policies, laws, and programs for integrated ecosystem management in dryland areas of western PRC 2. A recommended institutional structure for land degradation management in western PRC 3. A CPF for OP12 for GEF consideration</p>	<p>A coordinated 10-year plan for integrated ecosystem management in western PRC</p> <p>A recommended institutional structure acceptable to central Government</p> <p>CPF and project brief acceptable to all parties</p>	<p>Consultant reports and official documents submitted to higher authorities</p> <p>Consultant reports Official documentation of proposed reforms</p> <p>CPF submitted to GEF Council, for May 2002 meeting</p>	<p>Strategy may require depopulating some marginal areas and/or settling nomadic herdsman, thus raising resettlement issues.</p> <p>Institutional restructuring was initiated in 1998, so it may be too soon to consider further reforms</p> <p>Consensus on the CPF may take longer than anticipated.</p>

(Reference in text: page 3, para. 9)

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p>4. A tentative 10-year public investment package, consolidating all relevant priority projects</p> <p>5. A consolidated register of projects from external sources and pipeline projects and aid agency coordination mechanism</p> <p>6. High-priority projects ready for consideration as part of the 10th Five-Year Plan period or later</p>	<p>Public investment package submitted to Ministry of Finance and State Development Planning Commission (SDPC) for endorsement</p> <p>Register established and maintained, preferably on a public web site</p> <p>At least five high-priority projects studied to pre-feasibility level, for possible external funding</p>	<p>Register of projects, ongoing and pipeline, indicating investment size, executing agency, external support, and status</p> <p>Regular reports of all relevant Government and externally-supported projects</p> <p>Consultant reports, pre-feasibility studies, and evaluation of studies by SDPC, GEF technical assessment panel, and PRC panel of experts</p>	<p>Investment package must balance financing capacity and investment needs, but may err toward one extreme.</p> <p>Data may overestimate true extent of investment, as many projects may not come to fruition.</p> <p>Limited potential for cost recovery may inhibit Government from borrowing externally for the highest priority projects.</p>
<p>Activities</p> <p>1. Review of all existing plans and programs related to land degradation and biodiversity in western PRC</p> <p>2. Review of existing laws, regulations, and policies for consistency with integrated ecosystem management approach</p> <p>3. Review of institutional arrangements for land degradation management in dryland ecosystems and the need for structural change</p>	<p>All relevant provincial and central government agencies filled questionnaires.</p> <p>Strengths and weaknesses of key legislation and policies documented</p> <p>Organization charts, staff strengths, qualifications, committee structures, reporting mechanisms, etc.</p>	<p>Records of meetings and bibliography of reports collected</p> <p>Consultant reports, workshop proceedings, and commissioned papers</p> <p>Consultant reports and commissioned papers</p>	<p>Mechanism needed to establish a focal point in each province, to facilitate two-way information flow</p> <p>Preparing and passing new legislation are a time-consuming process. Enforcement may be a weak link.</p> <p>Future status of research, design, and monitoring institutes, which were detached from central ministries in 1998, is still uncertain. Institutional reform is difficult in the PRC.</p>

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
4. Compile biodiversity data and assess carbon sequestration potential for western PRC	Species lists, biodiversity index, plus qualitative assessment; carbon sequestration model	Consultant reports and commissioned research papers	Additional surveys may be needed if the required data are not available.
5. Document the key social issues to be addressed as part of the effort to achieve integrated ecosystem management in western PRC	Socioeconomic data, qualitative assessment of past programs, including resettling in marginal lands, interview sheets with potential beneficiaries	Consultant reports, workshop proceedings, commissioned studies	Resettled populations may not be willing to talk openly, relevant data may be difficult to obtain, and surveys conducted by foreign experts are often restricted.
6. Seek consensus on appropriate national and local strategies and policies to achieve environmental goals encompassed under the WDS	Participatory and consultative processes with all key stakeholders Draft documents to receive widest possible review by domestic and international experts	Workshop proceedings, compilation of comments and how addressed in successive drafts, and web site reviews	Outreach may not be sufficiently comprehensive to elicit the opinions of the full range of stakeholders needed to ensure a true consensus. Excessive time is required to modify policies and introduce legislation.
7. Establish standing aid agency coordination group	Majority of aid agencies meet regularly.	Minutes of group meetings	Aid agencies may prefer to operate independently.
8. Attempt to harmonize relevant sectoral five year development plans and the three main global environment conventions	Sectoral plans mainstream biodiversity, climate change impacts, desertification and integrated ecosystem management.	TA review missions Revised five-year plans and annual plans, including budgets	Sectoral agencies may not accept any mandate of SFA to intervene in their planning processes.
9. Select and specify ecological regions for priority support under the Partnership	Superimposition of biodiversity, land degradation, and poverty data by county, using geographic information systems (GIS)	Register of project interventions, consultant reports, commissioned papers	Adequate data may not be available for biodiversity at the county level.
10. Prepare a 10-year program to combat land degradation in selected ecoregions of national and global	Combined program accepted by all relevant government agencies	Consultant reports, CPF, and GIS database	Sectoral agencies may be reluctant to amend their existing plans to accord with the overall program.

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p>significance</p> <p>11. Define priority packages of investments and technical assistance for the selected ecoregions</p> <p>12. Prepare project brief suitable for GEF consideration, including incremental cost calculations</p> <p>13. Enumerate specific milestones and indicators for monitoring and measuring progress in combating land degradation</p> <p>14. Prepare and disseminate bilingual reports at key stages for international and domestic review</p> <p>15. Establish a website and post relevant documents for review</p> <p>16. Conduct steering committee and leading group meetings as necessary, but particularly at key milestones</p>	<p>Ranking of priority investment packages according to rational selection criteria</p> <p>Project Brief to be ready for May 2002 GEF Council meeting.</p> <p>Milestones and indicators that are relatively simple to monitor, using existing staff and equipment.</p> <p>All reports (including inception, midterm, and final) well presented and concise</p> <p>Web site established and maintained</p> <p>Steering committee and leading group meetings held at least twice during TA period</p>	<p>Consultant reports, CPF, and GIS database</p> <p>GEF submission records.</p> <p>Monitoring and evaluation report, as part of the consultant's final report.</p> <p>Submission of draft reports to the Asian Development Bank (ADB) and the Government Web pages</p> <p>Minutes of steering committee and leading group meetings</p>	<p>Institutional protectionism may inhibit rational selection of priority investment packages.</p> <p>GEF technical assessment panel and other external reviewers may not accept PRC priorities.</p> <p>Government may not be willing to allocate funds to monitoring and evaluation programs.</p> <p>Poor translation and lengthy documentation may reduce readability for key decision makers.</p> <p>Key stakeholders may not have access to Internet</p> <p>Senior staff are often difficult to assemble at the same time.</p>
<p>Inputs</p> <p>1. Institutional strengthening</p> <p>2. Consultants –</p> <ul style="list-style-type: none"> • International • Domestic <p>3. Training/study tour</p> <p>4. Workshops/ Seminars</p> <p>5. Commissioned research papers</p> <p>6. Translation services</p>	<p>Equipment - \$50,000</p> <p>Total Cost - \$620,000</p> <p>15 person-months</p> <p>50 person-months</p> <p>Total Cost - \$80,000</p> <p>\$20,000 per workshop x 5</p> <p>\$5,000 by 10 papers</p> <p>\$50,000 contract</p>	<p>Receipts of equipment purchased</p> <p>Consultant company invoices</p> <p>Invoices of travel and accommodation</p> <p>Receipts</p> <p>Lump sum for accepted papers</p> <p>Invoice for services</p>	<p>Inputs can be used flexibly as TA outcomes begin to emerge.</p> <p>Government will second counterpart staff to PMO.</p> <p>International and domestic consultants will work effectively as a combined team.</p>

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
7. Expert panel 8. Web design 9. Contingencies/ Others Total ADB-GEF Government	\$5,000 x 10 experts \$20,000 contract \$150,000 \$1,150,000 \$290,000	Lump sum payment Invoice	

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank^a			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	145	0	145
ii. Domestic Consultants/Expert Panel	0	170	170
b. International and Local Travel	25	20	45
c. Reports and Communications	30	10	40
2. Equipment and Software	40	0	40
3. Training, Seminars, and Conferences			
a. Facilitators/Translators	100	40	140
b. Training Program/Study Tour	75	0	75
4. Surveys/Commissioned Research Studies	0	50	50
5. Miscellaneous Administration and Support Costs	10	0	10
6. Representative for Contract Negotiations	5	0	5
7. Contingencies	45	35	80
Subtotal (A)	475	325	800
B. Global Environment Facility			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	155	0	155
ii. Domestic Consultants/Expert Panel	0	80	80
b. International and Local Travel	20	5	25
c. Reports and Communications	5	5	10
2. Equipment and Software	10	0	10
3. Training, Seminars, and Conferences			
a. Facilitators/Translators	0	10	10
b. Training Program/Study Tour	0	5	5
4. Surveys/Commissioned Research Studies	0	0	0
5. Misc. Administration and Support Costs	0	10	10
6. Representative for Contract Negotiations	0	0	0
7. Contingencies	30	15	45
Subtotal (B)	220	130	350
C. Government Financing			
1. Office Accommodation and Transport	0	50	50
2. Remuneration/Per Diem of Counterpart Staff	0	35	35
3. Training, Seminars, Workshops	0	30	30
4. Surveys and investigations	0	150	150
5. Others	0	25	25
Subtotal (C)	0	290	290
Total	695	745	1,440

^aADB-funded TA Program
Source: Staff estimates

(Reference in text, page 4, para. 12)

Notes:

1. The equipment includes two laptop computers, one work station, and softwares – word processing, browser, publishing, Geographic Information System, spreadsheet, etc. (\$20,000), office equipment (\$10,000), two mobile phones (\$1,000), plotter (\$5,000), color printer (\$1,000), plus servicing, replenishables, and repair (\$3,000).
2. As the objective of the TA is to develop a partnership among 12 provinces, 17 government agencies, and about 20 international agencies, a series of workshops, seminars, and conferences is required. These will comprise (i) regional workshops (3) to seek inputs from provincial (and lower level) authorities and regionally based research agencies; (ii) national policy coordination workshop (Beijing) to ensure that all central level agencies are committed to a holistic, integrated ecosystems approach, under the auspices of the Western Development Strategy; (iii) aid agency coordination group workshops (6), mostly in Beijing, to coordinate aid agency programs and commitments; (iv) an international workshop in Beijing to consider the draft Country Programming Framework and to agree on priority projects to proceed to phase 2. While the number of participants is difficult to state at this stage, we anticipate at least 300 for the regional workshops, 100 for the national workshop, 30-40 for each aid agency coordination group meeting, and 200 for the international workshop.
3. The proposed study tour is costed on the basis of a 10-person group to visit LandCare activities in Australia (a community-based program for management of land degradation) for 10 days (estimated cost \$35,000, including an organization fee, guide, transportation, translation, accommodation and per diems, miscellaneous costs). The balance is for four short (1-2 months) courses on selected topics (at appropriate universities overseas) at \$10,000 each, as ADB's contribution to capacity building for State Forestry Administration.
4. Reports include 100 copies of inception report (English only), 100 copies of midterm report (in English, with executive summary in English and Chinese), 100 copies of draft final report (in English, with executive summary in English and Chinese), and 200 copies of final report (in both English and Chinese), plus 100 copies of the main final report in PDF format on CD-ROM.

OUTLINE TERMS OF REFERENCE

A. Background

1. The objective of the People's Republic of China-Global Environment Facility (PRC-GEF) Partnership is to combat land degradation in dryland ecosystems in the western part of the PRC. This will be done through selective support for the National Action Plan for Implementation of the Convention to Combat Desertification (CCD-NAP) in synergy with other programs and projects that address land degradation in western PRC. The Partnership will (i) formulate strategies and implement supporting measures to reverse the trend of ecological deterioration and promote sustainable natural resources management as an integral part of the western development strategy (WDS); and (ii) strengthen the conservation and sustainable use of globally important biodiversity and promote carbon sequestration in the context of the Biodiversity Conservation Action Plan (BCAP) and the country's commitment to the United Nations Framework Convention on Climate Change (UNFCCC).

2. The Partnership will be governed by a country programming framework (CPF) to be developed through grant funding provided by the Asian Development Bank (ADB) and the Global Environment Facility (GEF). The CPF will represent an agreement between the PRC and the GEF to commit resources to sequenced priorities over an agreed-upon time frame (10 years).¹ The CPF will (i) describe the critical policy, legal, and institutional instruments and the changes needed to strengthen the enabling environment; (ii) harmonize relevant sectoral five year development plans and strategies of the Ministry of Agriculture (MOA), Ministry of Water Resources (MWR), State Environment Protection Administration (SEPA), and State Forestry Administration (SFA), the CCD-NAP, and the BCAP; (iii) identify ecosystems for priority support under the Partnership; (iv) define prioritized packages of investments and technical assistance to advance sustainable development and global environmental outcomes in selected priority ecosystems; and (v) define objectives, milestones, and indicators of favorable outcomes for the Partnership to combat land degradation.

3. The CPF will specify the overall resource envelope and sequencing of a PRC/GEF Partnership Program to be financed by the Government, GEF, and other domestic and external sources. External assistance will be tranching, and it is expected that GEF's contribution will diminish in successive tranches. The first tranche of GEF resources will be approved by the GEF Council at the same time as the CPF. Successful delivery of the partnership program will be assessed against programmatic indicators defined in the CPF. Sequential projects of the program will be approved based on achievement of agreed-upon benchmarks and milestones. Monitoring and evaluation (M&E) will be used to improve the likelihood of program success, evaluate progress in each phase, and establish targets for subsequent phases. As the program proceeds, projects will be elaborated in a flexible way within the agreed-upon programmatic priorities specified in the CPF. The program will commence during the 10th Five-Year Plan (2001-2005). Lessons learned from the initial years of implementation will help shape the sectoral development plans for the 11th Five-Year Plan period and beyond. The PRC practice of pilot-testing innovative policies and institutional approaches in designated areas before widespread replication will make adaptive learning a major output of the Partnership.

¹ Project implementation will continue beyond the 10-year period of financial commitments.

4. The partnership program will target specific dryland ecosystems to be defined in the CPF and to be identified during implementation of the PDF-B. These ecosystems will be selected using these criteria: (i) national sustainable development objectives; (ii) global environment significance; (iii) land degradation status and trends; (iv) potential for poverty reduction and economic development; (v) identified priorities in the Biodiversity Action Plan and other relevant plans; and (vi) opportunity to develop potentially replicable responses for integrated ecosystem management.

5. Since the resources available under the partnership program will be small in relation to the overall needs of the CCD-NAP and related plans, the Partnership will focus mainly on strategic investments for demonstration effect that would substantially influence the WDS, serve as a mechanism for aid agency coordination in support of the CCD-NAP, provide a window for learning and dissemination of lessons learned from integrated ecosystem management, and record the achievement of global environmental benefits. To enhance the catalytic nature of the Partnership, emphasis will be on the replicability of interventions and the environmental, social, and economic sustainability of processes initiated and their outcomes.

B. Terms of Reference for Consultants

6. The grant-funded technical assistance, in combination with funds from other sources, will support the following activities that will be undertaken by the consultants.

- (i) Prepare an overview of barriers to integrated ecosystem management and ways to overcome these (such as the necessary preconditions for creation of an enabling policy environment, legislative and regulatory aspects, institutional capacity) that would need to be considered in formulating a CPF; and make recommendations for harmonizing of laws and policies to overcome inconsistencies and eliminate perverse incentives.
- (ii) After assessing the mandates, roles, responsibilities, and programs of MOA, Ministry of Finance (MOF), MWR, SEPA, SFA, and State Development Planning Commission, formulate recommendations for institutional strengthening and capacity building, eliminating of conflicting and/or overlapping responsibilities, introducing of bottom-up consultative and participatory processes involving civil society, and integrating of sectoral agencies in formulating and implementing projects for integrated ecosystem management.
- (iii) Compile biodiversity information for western PRC. This will emphasize identification of sites characterized by species richness, habitat diversity; the importance of maintaining vital ecological processes; the conservation status of the ecosystem; and uniqueness of the ecosystem.
- (iv) Assess the carbon sequestration potential of western PRC, based on extrapolation of data on land use patterns, vegetative cover, and carbon content in major soil types in representative regions.
- (v) Identify dryland ecoregions as suitable sites for project interventions under the PRC-GEF Partnership. Each ecoregion will be identified using such criteria as (a) national sustainable development objectives; (b) land degradation status and trends; (c) global environment significance; (d) potential for poverty reduction and economic development; and (e) opportunity to develop potentially replicable responses for integrated ecosystem management.

- (vi) Identify priority packages of investments and technical assistance as a sequenced program of interventions to be supported by the Partnership. The packages will encompass investments, technical assistance, and capacity building to (a) develop an appropriate legal and policy framework; (b) strengthen institutional frameworks and create capacity to support identified CPF priorities; (c) finance projects in selected dryland ecoregions; (d) introduce participatory processes for cross-sectoral planning and project implementation; (e) develop the knowledge base for integrated ecosystem management; and (f) create an M&E system.
- (vii) Compile a profile of the social issues that need to be considered in the CPF (including a detailed poverty assessment), and formulate recommendations for incorporating public participation processes, and social improvement strategies covering education, gender issues, livelihood creation, lifeline assistance, and poverty reduction in targeted ecoregions.
- (viii) Define biophysical and socioeconomic indicators needed to monitor changes (based on existing facilities such as those developed by the China National Desertification Monitoring Center, the Forestry Information Technology Institute of the Chinese Academy of Forestry, and the Institute of Remote Sensing Applications of the Chinese Academy of Sciences) in the ecological environment, biodiversity status, extent and severity of land degradation, condition of water resources, and social well-being.
- (ix) Design a M&E system to (a) measure outcomes; (b) monitor achievement of program objectives; (c) provide feedback for learning, adaptive management of approaches, and program adjustment; (d) evaluate progress in each phase of the program; and (e) establish milestones, benchmarks and targets for subsequent phases.
- (x) Undertake consultation, workshops, awareness creation, consensus building, and participatory project development.
- (xi) Prepare a CPF that outlines the policy matrix, priority investment programs in selected ecoregions, and commitments among partners.
- (xii) Establish a transparent system for evaluating and ranking alternative investment projects in the priority areas.
- (xiii) Select a small set of priority projects for further analysis to prefeasibility level, and carry out the necessary analysis, (poverty impact assessment, environmental impact assessment, economic and financial analyses), and determine the potential for cost recovery.
- (xiv) Prepare inception, progress, midterm, draft final, and final reports (bilingual) as directed by ADB.

SCHEDULE OF CONSULTANT INPUTS AND MILESTONE EVENTS

Input	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June
Team Leader/Nat. Res. Manager												
Biodiversity Specialist												
Carbon Sequestration/Climate Change Specialist												
Land Use Planner/GIS Specialist												
Economist												
Domestic Consultants												
Expert Panel (part time)												
Commissioned Research			•		•				•			
Inception Report		•										
Regional Workshops					•		•					
Aid Agency Coordination Group Meeting		•		•		•		•		•		
International Workshop												•
Midterm Report				•								
Phase 1 Report – Draft CPF						•						
Review Period												
Priority Projects Selected									•			
Draft Final Report											•	
Final Report												•

CPF = country programming framework, GIS = geographic information systems.

Reference in text: page 5, para. 15)