



Technical Assistance Report

Project Number: 39020
November 2005

Technical Assistance People's Republic of China: Alternative Livelihood Options to Facilitate Coal Sector Restructuring (Financed by the Poverty Reduction Cooperation Fund)

CURRENCY EQUIVALENTS

(as of 1 October 2005)

Currency Unit	–	yuan (CNY)
CNY1.00	=	\$0.1235
\$1.00	=	CNY8.10

The exchange rate of the yuan is determined in relation to a weighted basket of currencies of the trading partners of the People's Republic of China. In this report, a rate of \$1.00 = CNY8.10 is used.

ABBREVIATIONS

ADB	–	Asian Development Bank
CNCA	–	China National Coal Association
KSOCM	–	key state-owned coal mine
MOC	–	Ministry of Construction
MOCA	–	Ministry of Civil Affairs
MOL	–	Ministry of Labor
NCICS	–	National Center for International Exchange on Work Safety
NDRC	–	National Development and Reform Commission
NPC	–	National People's Congress
PRC	–	People's Republic of China
SAC	–	State Assets Committee
SACMS	–	State Administration of Coal Mine Safety
SAWS	–	State Administration of Work Safety
SEPA	–	State Environmental Protection Administration
SGAWS	–	State General Administration of Work Safety
SOE	–	state-owned enterprise
SOCM	–	state-owned coal mine
TA	–	technical assistance
TVCM	–	town and village coal mine

TECHNICAL ASSISTANCE CLASSIFICATION

Targeting Classification	–	General Intervention
Sector	–	Multisector (Law, economic management, and public policy; and health, nutrition, and social protection)
Subsectors	–	National government administration, economic management, and social protection
Themes	–	Sustainable economic growth and inclusive social development
Subthemes	–	Promoting economic efficiency and enabling markets, and human development

NOTE

In this report, "\$" refers to US dollars.

This report was prepared by a team consisting of E. H. Hassing (team leader) and B. Lin.

I. INTRODUCTION

1. During the 2005 Country Programming Mission, the Government of the People's Republic of China (PRC) confirmed its request for technical assistance (TA) from the Asian Development Bank (ADB) to assist the China National Coal Association (CNCA) with a study of alternative livelihood options to facilitate coal sector restructuring to be financed by the Poverty Reduction Cooperation Fund.¹ In May 2005, the Fact-Finding Mission was fielded to assess the results of available studies and determine the scope of the TA. The Mission held discussions with representatives from the PRC Government and CNCA. Understanding was reached on the TA goals, purpose, scope, cost estimates, financing and implementation arrangements, and the consultants' terms of reference. The TA is included in the country pipeline for 2005. The TA design and monitoring framework is in Appendix 1.

II. ISSUES

2. Coal accounts for about 63% of the PRC's primary commercial energy consumption and almost all coal is produced domestically. In 2004, coal production in the PRC was about 1.9 billion tons; in 2005 it is expected to increase to about 2.0 billion tons in view of the PRC's projected economic growth. In general, coal mining is undertaken in three types of mines: (i) key state-owned coal mines (KSOCMs), (ii) local state-owned coal mines (SOCMs), and (iii) town and village coal mines (TVCMs). It is estimated that in 2004, KSOCMs, which include large, mechanized coal mines, produced about 50% of the total coal production in the PRC, SOCMs produced about 17%, while TVCMs and illegal small coal mines produced about 33%.² Small coal mines—defined as mines that produce not more than 300,000 tons of coal a year—comprise about half of the SOCMs, most of the TVCMs, and all illegal coal mines, and employ about 2 million miners. The coal industry also contributes significantly to the nation's employment and social stability with about 8 million registered coal miners. Half of this number are relatively poor miners who work under relatively dangerous working conditions in labor-intensive coal mines, which are operated at the county level and below.

3. To further develop its coal resources, the Government is giving priority to the construction of large, mechanized mines³ and the modernization and production improvement of existing large and medium-sized coal mines. At present the 10 largest KSCOMs account for less than 15% of the PRC's total coal production. To reduce the risk of any shortfall in coal supply, the Government aims to consolidate coal production by encouraging KSCOMs to acquire smaller and less efficient coal mines and form conglomerates with annual coal production of not less than 100 million tons. This move is also expected to promote partnerships between foreign investors and the conglomerates and thus improve the latter's management capabilities, financial performance, and operations. With regard to small coal mines, the Government is pursuing the closure of mines that have failed to adopt required safety practices, operate without a license, or are considered illegal. ADB is also providing financial assistance to the PRC for the establishment of a coal mine methane development project⁴ that will apply the latest technologies for increased production, capture, and utilization of methane that becomes available during underground coal mining and thus improve mine safety by reducing the risk of underground methane explosions, reduce greenhouse gas emissions, and improve the environment.

¹ The TA first appeared in *ADB Business Opportunities* (internet edition) on 7 April 2004.

² There are only a few private coal mines in the PRC.

³ At present the construction of 25 coal mines with a total capacity of more than 60 million tons is being accelerated and about 140 additional large coal mines are to be built in the next few years.

⁴ ADB. 2004. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the People's Republic of China for the Coal Mine Development Project*. Manila.

4. Throughout the PRC there are about 57 coal-producing cities at the prefecture or municipal level. Of that number, 47 depend on coal mining as their main source of income and function as de-facto state-owned enterprises (SOEs). The development of the coal industry has played an important role in the urbanization process in the PRC since traditionally, new municipalities were established for the development of KSCOMs and their population would be largely dependent on coal produced by the KSCOM. However, about 20 cities out of the 47 largely dependent on coal mining as their main source of income are experiencing sharply decreasing coal reserves including 14 that have nearly exhausted all their coal reserves. New coal production is being planned and started in new areas outside the 47 cities, which eventually will all experience dwindling coal reserves and an immediate requirement to diversify their economy. The total population in the 47 cities is estimated at about 10 million, about 2 million of whom work in coal mines. The decline of coal mining in the 14 cities has already led to serious economic and social problems such as (i) increasing numbers of unemployed coal miners, particularly those that lack skills to be employed in KSCOMs elsewhere; (ii) increasing demands on the local government for re-employment of laid-off coal miners, provision of social services, and creation of new livelihood options for them; (iii) decreased revenues for the local government; (iv) difficulty in restructuring urban economies and attracting new investments due to lack of experience; and (v) usually poor environmental conditions after termination of coal mining operations and abandonment of coal mines.

5. At the same time, the Government has intensified its efforts to close small coal mines, —particularly illegal ones and those that produce less than 90,000 tons a year—in view of their very dangerous working conditions and the considerable environmental damage they cause. ADB with financial assistance from the Poverty Reduction Cooperation Fund is supporting the development of a model socioeconomic and environmental mitigation program to address the unemployment and environmental problems caused by the closure of small coal mines in Shanxi Province.⁵ In the 47 cities, mine closure has further contributed to (i) considerable reduction of revenues collected from small coal mines by concerned local authorities; and (ii) higher unemployment of miners who are relatively poor and unable to take up their previous job of farmer. Consequently, if alternative livelihood options are not created in these cities, poverty and social instability are likely to increase to unacceptably high levels. Also, in the absence of alternative job opportunities, laid-off miners may seek employment in the small, illegal coal mines that are to be closed by the Government.

6. The cities with depleting coal reserves are also gradually experiencing (i) annual reductions in income from coal mining and decreasing funds for safety expenditures; (ii) increased need for government support to provide social welfare and pension payments to laid-off miners; (iii) difficulties in continuing coal production in accordance with government regulations and standards; (iv) uncertainty for the concerned local government as to how to gradually wind down coal mine operations and abandon the mines safely; and (v) increasing demands for environmental rehabilitation, maintaining social stability, and reducing poverty in their cities following closure of coal mines. In this context the National People's Congress (NPC) of the PRC has expressed its concern that four major problems in the PRC's mineral sector need to be urgently addressed to ensure its sustainable further development. The problems are (i) restructuring of the coal mining industry, (ii) development of additional coal mines, (iii) safety of coal miners, and (iv) economic restructuring of cities that are largely dependent on coal mining for their revenues. According to NPC, these problems are directly related to the prospects of the PRC for successful industrialization, modernization, and urbanization, and to the welfare of millions of urban residents.

7. Traditionally, the Ministry of Coal Industry was responsible for the PRC's main coal mines, operated as SOE's that guaranteed stable wages and pensions for the employees and provided

⁵ ADB. 2005. *Technical Assistance to the People's Republic of China for Poverty Reduction in Coal Mine Areas in Shanxi Province*. Manila.

them with housing, education, and medical care. However, the ministry was abolished in 1996 and the responsibility for coal mining, including the KSOCMs, was delegated to the concerned provincial governments while the Government maintained only a central supervisory role through the State Administration for Coal Industry (SACI). Following further reorganization of the coal sector in 1998, SACI was also abolished and the Government remained involved only in the occupational safety aspects of the coal sector through the State Administration of Work Safety (SAWS). In February 2005, SAWS became a cabinet-level department headed by a minister and was renamed as State General Administration of Work Safety (SGAWS). Within its organization a separate State Administration of Coal Mine Safety (SACMS) was established. The main objective of SACMS is to reduce the increasing number of accidents in underground coal mines in the PRC, which each year result in the death of more than 7,000 miners.

8. SACMS is planning to improve safety conditions in coal mines by (i) enforcing regulations for closure of unsafe coal mines and issuance of coal mine safety licenses, (ii) financing safety equipment and devices, and (iii) capacity building at the local government level by conducting safety training programs for mine safety supervisors.⁶ At the national level, CNCA represents more than 1,000 coal mines operating in the PRC and is closely associated with the National Center for International Exchange on Work Safety (Coal Mine Safety) or NCICS and SACMS. Both CNCA and NCICS act as focal points for overseas assistance in improving coal mine safety,⁷ increasing the efficiency of coal mining, and reducing environmental and social impacts associated with coal mining operations in the PRC.

III. THE TECHNICAL ASSISTANCE

A. Impact and Outcomes

9. The objective of the TA is to assist CNCA with developing and applying of a methodology for identifying alternative economic activities for cities that depend on coal mining as their main source of income and are experiencing decreasing coal reserves. Such alternative economic activities will be based on the cities' comparative economic advantage in these activities, enable them to restructure their economies, and provide alternative livelihood to redundant coal miners. The TA will also assess general investments and identify support programs, such as training, credit, and technical extension services, that will be required for this purpose as well as policy options for mitigating the social and environmental impacts that will occur in those cities with closure of the coal mines. The outline of corresponding model training and job creation programs, including their estimated cost, will be developed. A general national strategy for addressing the anticipated economic problems and social hardships in these cities within the context of the PRC's overall urbanization drive will be prepared. The findings of the TA will also be used for developing national policies to enable timely economic restructuring of all cities that at present are dependent on decreasing coal resources.

B. Methodology and Key Activities

10. The TA will be carried out in two phases. During phase 1, the consultants will gather and analyze existing data on all cities that are largely dependent on coal mining as their main source of income and are experiencing sharply decreasing coal reserves or are expected to experience this in the near future. In phase 2, the consultants will prepare a methodology for identifying alternative economic activities in those cities and investments and other support programs that will be required as well as policy options for mitigating social and environmental impacts. In this context the consultants will also prepare case studies for two coal mining cities, one in the northeast of the

⁶ The Government has allocated CNY3 billion (about \$366 million) for these activities.

⁷ To improve safety and health conditions in PRC coal mines, the United States Labor Department is providing technical assistance, which is financed by a grant of \$2.3 million.

PRC and one in the south. During TA implementation the consultants will organize two workshops. The first will be held at the end of phase 1 and will discuss the initial findings of the consultants; the second will be held at the end of the TA to discuss the prepared methodology for identifying alternative economic activities in the cities, required investments and support programs, policy options for mitigating the social and environmental impacts, and outline model training and job creation programs. To be invited are all stakeholders, including government organizations and policy makers involved in restructuring the economies of the cities, representatives of coal mining cities, National Development and Reform Commission (NDRC), Ministry of Civil Affairs (MOCA), Ministry of Construction (MOC), Ministry of Labor (MOL), State Assets Committee (SAC), State Environmental Protection Administration (SEPA), and concerned provincial planning and development commissions and other provincial agencies. The outline terms of reference for the consultants are in Appendix 2.

11. Key activities will include (i) making a detailed analysis of the economic and social structure of cities that are largely dependent on coal mining for their revenues and the impact of coal mine closures on poverty incidence and the environment in those cities; (ii) evaluating the national and provincial governments' efforts for economic restructuring of the cities within the framework of the PRC's overall urbanization program; (iii) identifying the most probable increases in poverty and environmental degradation over the next 5 years due to the closure of coal mines; (iv) developing a methodology for identifying alternative economic and livelihood activities; (v) assessing the required investment and support programs for this purpose; (vi) identifying of past and present commitments of the national and provincial governments vis-à-vis those cities; (vii) identifying policy options of the national and provincial governments for mitigating social and environmental impacts in the cities due to closure of the coal mines, including suitable job creation mechanisms and training programs; (viii) formulating possible economic restructuring strategies for the cities; (ix) developing model job creation and training programs to assist redundant miners, particularly, unskilled ones, to find alternative livelihood following closure of the mines; and (x) disseminating the results of the TA at the national level to promote their application in formulating corresponding national and provincial policies.

12. The major risks in the successful implementation of the TA include inadequate counterpart support, lack of adequate data or its untimely provision, delayed submission of required studies, delay in consultant selection, and poor consultant performance. In addition, support by national and concerned provincial governments through creation of alternative economic activities in the cities and mitigating the social and environmental impacts of closure of the coal mines is necessary for the success of the TA. Efforts will be made to ensure that competent international and domestic consultants are recruited on time. Close coordination among the consultants, executing and implementing agencies, and ADB will further mitigate the risks.

C. Cost and Financing

13. The TA is estimated to cost \$450,000 equivalent comprising foreign exchange of \$200,000 and local currency equivalent of \$250,000. ADB will provide \$300,000 equivalent to finance \$200,000 of the foreign exchange cost and \$100,000 equivalent of the local currency cost. The TA will be financed on a grant basis by the Poverty Reduction Cooperation Fund and will be administered by ADB. CNCA will contribute \$150,000 equivalent representing about 33% of the TA cost, to finance the remaining local currency cost. The cost estimates and financing plan are in Appendix 3.

D. Implementation Arrangements

14. CNCA will be the Executing Agency for the TA. ADB will select and engage the services of international and domestic consultants according to its *Guidelines on the Use of Consultants* and

other arrangements satisfactory to ADB for the appointment of domestic consultants. The consultants will have expertise in economic, social, and environmental, and social analyses; economic planning and restructuring; social and environmental impact assessment; social and environmental impact mitigation; and development of training and job creation programs for low-skilled workers in coal mining areas. An estimated of 22 person-months of consulting services (4 international and 18 domestic) will be required. The international consultants will include an economist and a social protection expert (2 person-months each) while the domestic consultants will include an economist, a poverty reduction expert, an environmental expert, and a training expert (4.5 person-months each). In addition, the services of an international training expert will be provided for 2 person-weeks to assist with developing model training and job creation programs. The international economist will act as team leader. The consultants' services will be provided through a consulting firm comprising international and domestic consultants, following the submission of simplified technical proposals and the use of the quality-and-cost-based selection method. The TA is expected to be implemented over 6 months.

15. CNCA will establish a counterpart team comprising representatives of CNCA, NCICS, and SACMS. The counterpart team will work in close cooperation with the coal-dependent cities that are affected by the closure of coal mines, particularly the two cities that are subject of the case studies, and will report directly to the minister of SGAWS. CNCA will organize joint meetings with NDRC, MOC, MOCA, MOL, SAC, SEPA, and the concerned provincial planning and development commissions to discuss the progress of the TA. It will also organize two workshops with their participation as well as that of other stakeholders and interested parties, including representatives of affected communities and aid agencies. The TA will include a study tour of about 2 weeks to Europe⁸ for two government officials to visit municipalities that experienced recent closure of their coal mines. The study tour will be organized by the consultants in consultation with ADB. CNCA will provide interpreters, local transportation, and office space equipped with suitable facilities in Beijing. Computers and other office equipment to be financed under the TA will be procured by the international economist in accordance with ADB's *Guidelines for Procurement* and transferred to CNCA after completion of the TA.

IV. THE PRESIDENT'S DECISION

16. The President, acting under the authority delegated by the Board, has approved ADB administering technical assistance not exceeding the equivalent of \$300,000 to be financed on a grant basis by the Poverty Reduction Cooperation Fund to the Government of the People's Republic of China for Alternative Livelihood Options to Facilitate Coal Sector Restructuring, and hereby reports this action to the Board.

⁸ Possible countries for the visit include Belgium, Germany, France, and the United Kingdom.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>Impact</p> <p>Alternative economic activities developed and social and environmental impacts of closure of coal mines mitigated in cities dependent on decreasing coal reserves.</p>	<p>New investment and job opportunities by 2010^a</p> <p>Stabilization/decrease of poverty incidence and rehabilitation of environmental degradation</p>	<p>National statistics and regional data</p> <p>Survey of poverty impact</p>	<p>Assumptions</p> <p>Technical assistance (TA) design implemented effectively</p> <p>TA recommendations disseminated and implemented effectively</p>
<p>Outcome</p> <p>TA report and recommendations agreed upon</p>	<p>Memorandum of understanding (MOU) of final tripartite meeting signed by the Government and the Asian Development Bank (ADB)</p>	<p>MOU</p> <p>Consultant's final report</p> <p>Back-to-office report of final TA tripartite meeting mission</p>	<p>Assumptions</p> <p>Effective stakeholder participation and sense of ownership developed</p> <p>Adequate support by national and concerned provincial governments for creation of alternative economic activities in the cities and mitigating the social and environmental impacts of closure of the coal mines</p> <p>Risks</p> <p>Change in Government priorities and delay in reforms</p> <p>Inadequate counterpart support and lack of adequate data or its untimely provision</p>
<p>Outputs</p> <ol style="list-style-type: none"> 1. Analysis of the economic and social structure of cities completed 2. A methodology for identifying alternative economic and livelihood activities agreed upon 3. Job creation and training programs to assist redundant miners to find alternative livelihood agreed upon 	<p>Inception report, week 3 Draft final report, week 14 Final report, week 27</p> <p>Government, development partners, and nongovernment organizations endorse methodology</p> <p>Inception report, week 3 Draft final report, week 14 Final report, week 27</p>	<p>TA reviews weeks 5, 15, and 28</p> <p>Workshop reports</p> <p>TA reviews weeks 5, 15, and 28</p>	<p>Assumption</p> <p>No restriction on availability and access to timely information and personnel</p>

<p>Activities with Milestones</p> <ul style="list-style-type: none"> (i) During phase 1, consultants to gather data on all cities that are largely dependent on coal mining as their main source of income and are experiencing sharply decreasing coal reserves or are expected to experience this in the near future (week 1–14) (ii) Carry out the first workshop (week 15) (iii) Organize international field study (week 16) (iv) Prepare two case studies, one for a coal mining city in the northeast of the People's Republic of China and one for a coal mining city in the south (week 15–25) (v) During phase 2, consultants to prepare a methodology for identifying alternative economic activities in these cities and investments and other support programs that will be required for this purpose as well as policy options for mitigating the social and environmental impacts (week 15–25) (vi) Carry out the second workshop (week 27) (vii) Disseminate the results of the TA at the national level to promote their application in formulating corresponding national and provincial policies (week 28) 	<p>Inputs: \$450,000</p> <p>Financing:</p> <p>ADB: \$300,000</p> <p>Government: \$150,000</p>
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^a The targets will be developed during technical assistance implementation.

OUTLINE TERMS OF REFERENCE FOR CONSULTING SERVICES

1. The Asian Development Bank (ADB) will select and engage the services of international and domestic consultants according to its *Guidelines on the Use of Consultants*. The consultants will have expertise in economic, social, environmental, and social analyses; economic planning and restructuring; social and environmental impact assessment; social and environmental impact mitigation; and development of training and job creation programs for low-skilled workers in coal mining areas. An estimated 22 person-months of consulting services (4 international and 18 domestic) will be required. The international consultants will include an economist and a social protection expert (2 person-months each) while the domestic consultants will include an economist, a poverty reduction expert, an environmental expert, and a training expert (4.5 person-months each). In addition, the services of an international training expert will be provided for 2 person-weeks to assist with developing model training and job creation programs. The international economist will act as team leader. The consultants will work in close collaboration with the China National Coal Association (CNCA) and ensure effective transfer of know-how.

2. When the technical assistance (TA) starts, the consultants will do a detailed background study to thoroughly understand issues regarding alternative livelihood options to facilitate coal sector restructuring in the People's Republic of China (PRC). The consultants will review reports and studies, including those of CNCA, government agencies, and international agencies, including ADB, World Bank, and other aid agencies that are giving assistance in restructuring the coal sector or creating alternative livelihood for the poor in rural areas. After reviewing the basic information, the consultants will determine the selection criteria and number of pilot cities, and recommend pilot cities for approval by CNCA and ADB. The consultants will evaluate international experience in related areas and its relevance to the PRC, and tailor the recommendations to ensure they are relevant to and can be implemented in the PRC.

A. Terms of Reference

3. The terms of reference for consulting services will include, but will not be limited to the following.

1. Phase 1: Data Collection and Preliminary Analysis

4. During phase 1, the consultants will do the following:

- (i) Collect and analyze existing, basic data, relevant information, and research reports on coal resources and mine closure in the PRC.
- (ii) Prepare a summary profile of cities that are known to be largely dependent on coal mining, but whose coal reserves are being depleted.
- (iii) Determine the economic and social structure of cities that are largely dependent on coal mining for their revenues and the impact of coal mine closures on poverty incidence and the environment in these cities. Collect data on the environment and employment in coal mine areas. Organize the survey in key coal mine areas and analyze the situation and trends for the number of coal mine closures and unemployment in the next 10 years.
- (iv) Identify and evaluate past and present commitments of the national and provincial governments to these cities, particularly with regard to entitlements of the miners; evaluate the plans and efforts of the national and provincial

governments with regard to economic restructuring of those cities within the framework of the PRC's overall urbanization program; and identify the key barriers to and the options of reemployment training and its mechanisms.

- (v) Identify the key problems and main social and economic impacts of the depletion of the coal reserves and the most probable increases in poverty and environmental degradation in the cities due to the closure of coal mines over the next 5 years.
- (vi) Conduct participatory activities in the pilot cities to collect data from low-income and vulnerable households to determine their concerns regarding coal mine closure.
- (vii) Review the existing financing mechanisms and types of assistance for restructuring and reemployment. Introduce relevant experience of other countries with alternative livelihood options to facilitate coal sector restructuring.
- (viii) Review the reemployment methods and restructuring models. Propose job creation programs, the technologies of environmental recovery, and policies and laws related to reemployment and coal sector restructuring.
- (ix) In consultation with ADB, organize a study tour to Europe for two government officials to review government policies and actions taken to mitigate social and environmental impacts for municipalities that recently experienced closure of coal mines.
- (x) Organize the first workshop at the end of phase 1 and discuss the initial findings of the consultants.

2. Phase 2: Methodology for Identifying Alternative Economic Activities and Investments and Other Support Programs

5. Using the results of phase 1, the consultants will do the following:

- (i) Develop a methodology for identifying alternative economic and livelihood activities, which would offer cities that depend on coal mining as their main source of income a comparative economic advantage and enable them to restructure their economies and provide alternative livelihood to redundant coal miners.
- (ii) Assess the required investment and support programs for the purpose, including suitable job creation mechanisms and training programs. Identify policy options for the national and provincial governments for mitigating the social and environmental impacts of closure of the coal mines.
- (iii) Considering international experience, analyze potential modes and methods for restructuring and environmental protection.
- (iv) Formulate possible economic restructuring strategies for the cities to address the anticipated economic problems and social hardships in the context of the PRC's overall urbanization drive. Propose national strategies for the development of mining cities in the next 10–20 years.

- (v) Develop a model for job creation and training programs to assist redundant, unskilled miners to find alternative livelihood activities following closure of the coal mines. Develop the outline for the corresponding model programs, including their estimated cost.
- (vi) Analyze the economic, poverty, financial, and environmental impact of the identified alternative economic and livelihood activities in the pilot cities in accordance with ADB guidelines and methodologies. For analysis of the financial and financial management aspects, take into account “Financial Due Diligence - Methodology Note and Financial Management Assessment Questionnaire” prepared by ADB. Establish and quantitatively evaluate the linkage between alternative economic and livelihood activities and poverty reduction.
- (vii) Develop an effective monitoring and evaluation system by reviewing all related documents to determine a set of monitoring indicators for economic growth, energy efficiency, institutional reforms, poverty and social aspects, and environmental improvement. Ensure that the indicators are appropriate for the monitoring system’s objectives, the main stakeholders, the speed with which the information is needed, and the cost. Develop management, monitoring, and inspecting mechanisms.
- (viii) Assess resource requirements and institutional arrangements for monitoring the TA impact, and identify skills in data collection, analysis, and reporting and management information system skills required to implement the monitoring and evaluation system. The consultants will identify the training requirements and provide the necessary training on monitoring.
- (ix) Organize the second workshop at the end of TA implementation to discuss the prepared methodology for identifying alternative economic activities in the cities, required investments and support programs, policy options for mitigating the social and environmental impacts, and outline model training and job creation programs.
- (x) Prepare two case studies, one for a coal mining city in the northeast of the PRC and one for a coal mining city in the south. Assess unemployment, economic, environmental, and social issues in the pilot areas. Develop a strategy for restructuring, reemployment, and environmental protection. Assess the economic, environmental, and social impacts of the proposed strategy.
- (xi) Hold a consultation workshop with all stakeholders to present the TA final draft report with recommendations that include proposed implementation mechanisms and required capacities. Incorporate comments into the final report.
- (xii) Disseminate the results of the TA at the national level to promote their application in formulating corresponding national and provincial policies.

B. Reports

6. The consultants will submit the following reports:

- (i) **Inception report.** The inception report will be submitted within 1 month after the TA starts. It will summarize the initial findings, and suggest changes needed (if

any) in the TA's approach, methodology, and time schedule. It will include a proposed outline of the final report

- (ii) **Draft final report and the first workshop.** The consultant will submit a draft final report, which CNCA and ADB will have 3 weeks to review. The draft will be discussed in the first workshop with the main stakeholders, counterpart team, and key officials from other government agencies involved in sector restructuring. ADB staff will participate in the workshop. The workshop's main objectives are to (a) present TA findings and recommendations to policy makers and stakeholders, (b) facilitate idea exchange and gather comments, (c) increase a sense of ownership and commitment to the TA recommendations, and (d) allow policy makers to discuss stakeholders' feedback.
- (iii) **Final report and second workshop.** The consultants will submit a final report, taking into account the comments of CNCA and ADB on the draft final report and discussions during the second workshop. The consultants will write the final report and translate it into Chinese. The consultants will organize a final workshop with the participation of the main stakeholders to disseminate the TA findings and recommendations.
- (iv) **Other reports.** A report on each workshop, and a report at the end of the international field visit, summarizing the main issues and findings, will also be submitted.

COST ESTIMATES AND FINANCING PLAN
(\\$)

Item	Foreign Exchange	Local Currency	Total Cost
A. Poverty Reduction Cooperation Fund Financing^a			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	110,000	0	110,000
ii. Domestic Consultants	0	72,000	72,000
b. International and Local Travel	20,000	5,000	25,000
c. Reports and Communications	3,500	5,500	9,000
2. Equipment ^b	12,000	0	12,000
3. Workshops ^c	20,000	5,000	25,000
4. Study Tour ^d	12,000	0	12,000
5. Miscellaneous Administration and Support Costs	2,500	2,500	5,000
6. Contingencies	20,000	10,000	30,000
Subtotal (A)	200,000	100,000	300,000
B. Government Financing			
1. Office Accommodation and Transport	0	30,000	30,000
2. Remuneration and Per Diem of Counterpart Staff	0	52,000	52,000
3. Training, Study Tour, Seminars, and Conferences	0	30,000	30,000
4. Others	0	38,000	38,000
Subtotal (B)	0	150,000	150,000
Total	200,000	250,000	450,000

^a Administered by the Asian Development Bank.

^b Including a computer, a photocopier, a laser printer, a projector, and facsimile machine.

^c Including one international specialist for about 2 person-weeks to assist with preparing the outline training and job creation programs.

^d Including the cost of airfare and accommodation.

Sources: China National Coal Association and Asian Development Bank estimates.