



Technical Assistance Report

Project Number: 51382-002
Transaction Technical Assistance (TRTA)
July 2018

People's Republic of China: Shanxi Technical and Vocational Education and Training Development Demonstration Project

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Asian Development Bank

TECHNICAL ASSISTANCE FOR PROJECT PREPARATION

A. Justification

1. The government has requested a loan of \$100 million from the ordinary capital resources of the Asian Development Bank (ADB) to develop well-trained skilled workforce meeting the needs of priority industries in Xinzhou, Shanxi Province of the People's Republic of China (PRC). The proposed transaction technical assistance (TA) will support the preparation of the project through technical, sector and industry assessments, economic and financial analyses, financial management and procurement capacity assessments, poverty, social, and gender analysis, environment and social impact assessments. It will also build the capacity of the Xinzhou Municipal Government and technical and vocational education and training (TVET) institutions to implement the ensuing project.¹ The TA is included in ADB's country operations business plan for the PRC, 2018–2020.²

B. Outputs and Activities

2. **Output 1: Environment and social impact assessments and planning documents prepared.** The TA will support environment and social impact assessments and the preparation of environmental management and resettlement plans. Under output 2, the project will support the construction of education and training facilities for three secondary TVET institutions (Xinzhou Senior Technician School, Agriculture Vocational Education School, and Tourism Vocational Education School), as well as the construction of shared and/or public facilities such as research and development (R&D) and technology innovation centers, entrepreneurship and innovation centers, and training centers. This will have temporary and site-specific environmental and involuntary resettlement impacts. Such impacts will be reviewed, and an initial environmental evaluation report and environmental management plan, a land acquisition and resettlement due diligence report which includes a socioeconomic survey report and resettlement plan will be prepared for the project.

3. **Output 2: Due diligence and project documents completed.** The TA will support technical, sector and industry assessments, economic and financial analyses, financial management and procurement capacity assessments, poverty, social and gender analysis, and preparation of project documents. Under Output 2, facilities to be constructed will conform to green building standards, and adopt energy and water saving measures. The TA will support assessments of climate change risks and impacts, and possible climate mitigation and/or adaptation interventions. A climate risk and vulnerability assessment and management report will be prepared. Assessments will also be conducted to review progress in the implementation of national, provincial, and municipal policies and reform actions in the TVET sector, with attention to school–enterprise cooperation and the use of information and communication technology (ICT) in the delivery and management of TVET, including the needs and potential for innovative technology courses such as artificial intelligence, big data, e-commerce, internet of things, virtual reality, and 3D printing, and to identify gaps to be addressed under the project. At the same time, the feasibility of public–private partnerships (PPPs) to design, build, manage, and operate practical training facilities, laboratories, and other facilities will be explored and possible PPP contracts will be identified. The existing systems and capacity of the Xinzhou Municipal Government in financial management and procurement will be assessed, and potential risks and

¹ The TA first appeared in the business opportunities section of ADB's website on 1 June 2018.

² ADB. 2018. *Country Operations Business Plan: People's Republic of China, 2018–2020*. Manila. The TA title has been adjusted to better reflect its objective.

mitigating measures will be identified. The TA will further support assessments of three priority industries in Xinzhou (equipment manufacturing, agricultural products processing, and tourism) to identify areas in which strategies and action plans need to be developed to upgrade the industries and address bottlenecks in technical, managerial, and business skills, R&D, and technology innovation. Data on poverty, gender, and other social aspects of TVET and the three priority industries will be collected and analyzed to assess the current situation of students, teachers, school and college management staff, employees, employers, and other direct and indirect project beneficiaries and stakeholders, as well as potential negative and positive impacts of the project on various stakeholders. A social development and gender action plan for the project will be prepared. Moreover, cost-benefit analysis and analysis of fiscal impacts and financial sustainability of the project will be conducted. Based on these assessments and analyses, the report and recommendation of the President, the project administration manual, and other linked documents will be prepared.

4. **Output 3: Advance procurement actions supported.** The TA will help the Xinzhou Municipal Government prepare technical and bidding documents for advance consulting service recruitment and procurement. If appropriate, advance consulting service requirement and procurement will be conducted by Xinzhou Municipal Government.

5. The major outputs and delivery dates are summarized in Table 1.

Table 1: Summary of Major Outputs and Activities

Major Output	Delivery Date
Technical and bidding documents for advance consulting service recruitment and procurement	October 2018/June 2019
PPP feasibility assessment	November 2018
Climate risk and vulnerability assessment and management report	November 2018
Land acquisition and resettlement due diligence report	November 2018
Resettlement plan	December 2018
Initial environmental examination and environmental management plan	December 2018
Financial management and procurement capacity assessments	December 2018
TVET sector assessment	January 2019
Priority industry assessments (equipment manufacturing, agricultural products processing, tourism)	January 2019
Poverty, social, and gender analysis; and social development and gender action plan	February 2019
Economic and financial analyses	February 2019
RRP, PAM, and other linked documents	March 2019

PAM = project administration manual, PPP = public-private partnership, RRP = report and recommendation of the President, TVET = technical and vocational education and training.

Source: Asian Development Bank.

C. Cost and Financing

6. The TA is estimated to cost \$450,000, of which \$400,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-other sources). The key expenditure items are listed in Table 2. The government will provide counterpart support in the form of counterpart staff, office space, data, information, and other in-kind contributions. The government was informed that approval of the TA does not commit ADB to finance any ensuing project.

Table 2: Cost Estimates and Financing Plan
(\$'000)

Item	Amount
A. Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	169.5
ii. National consultants	188.5
b. Out-of-pocket expenditures	
i. International and local travel	30.6
ii. Reports and communications	10.0
2. Contingencies	1.4
Total	400.0

Note: The technical assistance (TA) is estimated to cost \$450,000, of which contributions from the Asian Development Bank are presented in the table above. The government will provide counterpart support in the form of counterpart staff, office space, data, information, and other in-kind contributions. The value of government contribution is estimated to account for 11% of the total TA cost.

^a Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-other sources).

Source: Asian Development Bank estimates.

D. Implementation Arrangements

7. The Asian Development Bank (ADB) will administer the TA. ADB will select, supervise, and evaluate consultants during implementation of the TA. The Xinzhou Municipal Government will be the executing agency of the TA. It will establish a project leading group to provide guidance and support in preparing the ensuing project. The project leading group will be chaired by the vice-mayor, and comprising representatives of the Xinzhou Municipal Bureau of Finance, development and reform commission; the bureaus of education, planning, environmental protection, land resources, human resources and social security, industry and commerce, and SMEs; agriculture commission; and tourism development commission. The Xinzhou Municipal Bureau of Education will be the implementing agency and will be responsible, through its project management office, for providing guidance and support to the consultants engaged under the TA and involving all relevant institutions during TA implementation. The implementation arrangements are summarized in Table 3.

Table 3: Implementation Arrangements

Aspects	Arrangements									
Indicative implementation period	July 2018–February 2020									
Executing agency	Xinzhou Municipal Government									
Implementing agency	Xinzhou Municipal Bureau of Education									
Consultants	To be selected and engaged by ADB									
	<table border="1"> <tr> <td>Quality- and cost-based selection</td> <td>Consulting firm for project design, due diligence, and advance procurement actions</td> <td>\$304,700</td> </tr> <tr> <td>Individual consultant selection</td> <td>International environment specialist (1.5 person-months)</td> <td>\$39,200</td> </tr> <tr> <td>Individual consultant selection</td> <td>National environment, resettlement,</td> <td>\$54,700</td> </tr> </table>	Quality- and cost-based selection	Consulting firm for project design, due diligence, and advance procurement actions	\$304,700	Individual consultant selection	International environment specialist (1.5 person-months)	\$39,200	Individual consultant selection	National environment, resettlement,	\$54,700
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Aspects	Arrangements		
		climate change specialists and civil engineer (6.5 person-months)	
Disbursement	The TA resources will be disbursed following ADB's <i>Technical Assistance Disbursement Handbook</i> (2010, as amended from time to time).		

ADB = Asian Development Bank, TA = technical assistance.

Source: Asian Development Bank.

8. **Consulting services.** ADB will engage the consultants following the ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions.³ ADB will recruit one international consulting firm for project design, due diligence, and advance procurement actions to provide 24.5 person-months of consulting services (international, 7.5 person-months; national, 17 person-months), using the quality- and cost-based selection method with a quality–cost ratio of 90:10 and simplified technical proposal. ADB will also recruit five individual consultants (international, 1.5 person-months; national, 6.5 person-months) to prepare safeguards planning documents, and climate risk and vulnerability assessment report, and to review detailed engineering drawings. Lump-sum payments and/or output-based contracts will be considered. The required consulting services are summarized in Table 4.

Table 4: Summary of Consulting Services Requirement

International	Person-months	National	Person-months
Engaged as individual			
Environment specialist	1.5	Environment specialist	2.0
		Resettlement specialist	2.0
		Climate change specialist	1.0
		Civil engineer	1.5
Subtotal	1.5	Subtotal	6.5
Engaged through consulting firm			
School–enterprise cooperation specialist	1.5	School–enterprise cooperation specialist/team leader	3.0
Public–private partnership specialist	1.5	Public–private partnership specialist	1.5
Equipment manufacturing industry specialist	1.5	Equipment manufacturing industry specialist	1.5
Agricultural products processing industry specialist	1.5	Agricultural products processing industry specialist	1.5
Tourism industry specialist	1.5	Tourism industry specialist	1.5
		ICT in TVET specialist	1.5
		Social development and gender specialist	2.0
		Procurement specialist	1.5
		Financial management specialist	1.5
		Economist	1.5
Subtotal	7.5	Subtotal	17.0
Total	9.0		23.5

ICT = information and communication technology, TVET = technical and vocational education and training.

³ Terms of Reference for Consultants (Supplementary Appendix) are available upon request.