

Technical Assistance Report

Project Number: 49308-002
Transaction Technical Assistance (TRTA)
August 2017

People's Republic of China: Support for the Guangxi Modern Technical and Vocational Education and Training Development

CURRENCY EQUIVALENTS

(as of 23 August 2017)

Currency unit – yuan (CNY)

CNY1.00 = \$0.1501

\$1.00 = CNY6.6641

ABBREVIATIONS

ADB	–	Asian Development Bank
ASEAN	–	Association of Southeast Asian Nations
GED	–	Guangxi Education Department
GZAR	–	Guangxi Zhuang Autonomous Region
MOE	–	Ministry of Education
PMO	–	program management office
TA	–	technical assistance
TVET	–	technical and vocational education and training

NOTE

In this report, "\$" refers to United States dollars.

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I. THE PROPOSED PROJECT

1. The economic structure of Guangxi Zhuang Autonomous Region (GZAR) has undergone significant changes since 2000, supported by steady economic growth. Yet GZAR remains one of the poor provinces, with 9.9% of the population living below the poverty line. Building on its strategic location, GZAR is expected to become a gateway to the Association of Southeast Asian Nations (ASEAN) and a pathway connecting the Silk Road Economic Belt and the 21st Century Maritime Silk Road (Belt and Road Initiative). However, concern is growing that shortages of skilled labor could constrain socioeconomic development in GZAR. Although technical and vocational education and training (TVET) has been one of the sources of skilled labor, being supply-driven and under-resourced, GZAR's TVET system lags in quality and relevance, failing to address developmental challenges effectively.

2. The Guangxi Modern Technical and Vocational Education and Training Development Program will support the implementation of the GZAR Modern TVET System Development Plan, 2015–2020 (the government program) formulated against this background. The program's expected impact will be socioeconomic development in GZAR accelerated. The outcome will be a TVET system that provides graduates with better employment opportunities in GZAR's industries established. The program's four outputs are (i) industry relevance of TVET enhanced, (ii) quality of TVET improved, (iii) inclusiveness of TVET increased, and (iv) role of TVET in regional economic development expanded. The government has requested a loan of \$250 million from the Asian Development Bank's (ADB's) ordinary capital resources. German development cooperation through KfW will cofinance the program in the amount of \$200 million equivalent (in euros).

II. THE TECHNICAL ASSISTANCE

A. Justification

3. The transaction technical assistance (TA) aims to strengthen the capacity of the TVET system in GZAR to develop and implement the key interventions initiated with the adoption of the Modern TVET System Development Plan. The program is a results-based lending program, which focuses on overall results and system improvements. Technical assessments conducted for the program have identified gaps in the plan and program systems related to the key interventions that need to be filled by the GZAR government. The TA was requested to develop the capacity of, and provide knowledge and expertise currently unavailable to the government, regarding quality assurance; practical and in-company training mechanisms for TVET teachers; TVET groups comprising sector- or industry-relevant TVET institutions, enterprises, and research institutes; modern apprenticeship programs; cooperation between TVET institutions and enterprises in GZAR and ASEAN countries; and program management, including safeguards. Additionally, the TA will support independent third-party verification of the achievement of disbursement-linked indicators (DLIs), and baseline and follow-up surveys for an impact evaluation study. The TA is included in ADB's country operations business plan for the People's Republic of China, 2016–2018.¹

4. **Quality assurance.** In 2015, the Ministry of Education (MOE) introduced a new internal quality assurance system based on self-assessment and reporting, in lieu of the external rating system that had been used until then. Following MOE's guidance, Guangxi Education Department

¹ ADB. 2016. *Country Operations Business Plan: People's Republic of China, 2016–2018*. Manila. The TA first appeared in the business opportunities section of ADB's website on 29 August 2017.

(GED) issued detailed guidelines for establishing an internal quality assurance system in tertiary TVET colleges in 2016. A few tertiary TVET colleges have been selected to pilot test the internal quality assurance system, which is still in the early stages of implementation. GED also prepared detailed guidelines for establishing an internal quality assurance system in secondary TVET schools, which have not yet been issued.

5. Practical and in-company training mechanisms for technical and vocational education and training teachers. The National Modern TVET System Development Plan, 2014–2020 identifies the development of a teaching force with dual qualifications (having teaching license and industry experience) as one of the key tasks, and aims to increase dual qualification teachers to more than 60% of the total teaching force. In GZAR, dual qualification teachers accounted for only 38% at secondary TVET schools and 42% at tertiary TVET colleges in 2015. Although the national TVET teacher training bases established in Guangxi Normal University and Guangxi University of Science and Technology organize 3–6 months of training for TVET teachers, including practical training in cooperation with enterprises, the number of teachers who can participate in the training is limited. Other practical and in-company training mechanisms need to be developed for TVET teachers, especially in rural counties, who have little opportunities to receive any kind of training.

6. Technical and vocational education and training groups. Following the Opinions on Facilitating the TVET Group Model of School Operation issued by the MOE in 2015, GED and Guangxi Human Resources and Social Security Department jointly published the Guidelines on School Operation by TVET Groups and the Implementation Plan for Development of TVET Groups.² TVET groups encourage resource sharing, and facilitate the integration of education and industry training, and school–enterprise cooperation, with the participation of TVET institutions that offer similar courses of study in a sector or industry, enterprises operating in the sector or industry, and research institutes. GZAR had 27 TVET groups in 2016, but these groups barely provide platforms for education–industry training integration and school–enterprise cooperation, though resource sharing among TVET institutions in the group materializes to some extent.

7. Modern apprenticeship programs. In 2014, MOE issued the Opinions on Pilot Implementation of Modern Apprenticeships. In 2015, 100 tertiary TVET colleges were selected to pilot test modern apprenticeship programs, of which three were in GZAR. In 2016, about 60 students of the three tertiary TVET colleges in GZAR started 3-year modern apprenticeship programs. GED has yet to issue detailed guidelines for the modern apprenticeship programs.

8. Cooperation between technical and vocational education and training institutions in Guangxi Zhuang Autonomous Region and Association of Southeast Asian Nations countries. Regional exchanges and cooperation in education with the countries along the Belt and Road are promoted in the Education Action for Joint Development of the Belt and Road released by MOE in 2016. Although GZAR has been one of the most dynamic provinces in the People's Republic of China in terms of regional exchanges and cooperation with ASEAN countries, these activities have been confined to a limited number of TVET institutions in GZAR, lacking a long-term strategy to promote cross-border trade and investment, and technology transfer.

² Government of the People's Republic of China (PRC), Ministry of Education. 2015. *Opinions on Facilitating the TVET Group Model of School Operation*. Beijing; Government of the PRC, GED and Guangxi Human Resources and Social Security Department. 2015. *Guidelines on School Operation by TVET Groups*. Guangxi; Government of the PRC, GED and Guangxi Human Resources and Social Security Department. 2015. *Implementation Plan for Development of TVET Groups*. Nanning.

B. Outputs and Activities

9. The TA will have four outputs:

10. **Output 1: Mechanisms for ensuring the quality of technical and vocational education and training improved.** The TA will support, within the framework of the national and provincial guidelines for an internal quality assurance system, the identification of essential quality elements to focus, and the development of practical tools to assist TVET institutions in establishing an internal quality assurance system. Training for TVET institutions on an internal quality assurance system will be organized under the TA. Additionally, the TA will review the existing institutions and mechanisms for training TVET teachers at the national, provincial, municipal, and county levels, in particular those for practical and in-company training, to obtain dual qualifications. Based on findings, recommendations for improving practical and in-company training mechanisms for TVET teachers, especially in rural counties, will be developed.

11. **Output 2: Measures to strengthen technical and vocational education and training groups and modern apprenticeship programs developed.** The TA will support the development of measures to strengthen the governance, functions, and capacity of TVET groups in facilitating school–enterprise cooperation and employer and industry engagement in the development and delivery of TVET. Policy, legal, and regulatory frameworks and financing for TVET groups will be reviewed, and the governance structure and operating procedures of different types of TVET groups will be examined through questionnaires and interviews. To address weaknesses identified, the capacity development plans of selected TVET groups will be developed and supported. The TA will also undertake a review of the policy, legal, and regulatory frameworks and financing mechanisms for modern apprenticeship programs; and interviews and focus group discussions with students, teachers, and enterprises that have been involved or are willing to participate in modern apprenticeship programs. Recommendations for preparing detailed operational guidelines for modern apprenticeship programs will be developed.

12. **Output 3: New cooperation models between technical and vocational education and training institutions and enterprises in Guangxi Zhuang Autonomous Region and Association of Southeast Asian Nations countries developed.** The TA will take stock of existing cooperation activities between TVET institutions and enterprises in GZAR and ASEAN countries, and review relevant experiences of TVET institutions in GZAR. Policy, legal, and regulatory frameworks; institutional arrangements; and financing mechanisms for cooperation activities between TVET institutions and enterprises in GZAR and ASEAN countries will be examined. Based on findings, concepts and procedures to establish new cooperation models will be developed.

13. **Output 4: Capacity of technical and vocational education and training administration to provide guidance and supervision for technical and vocational education and training institutions and manage the program strengthened.** The TA will strengthen the capacity of regional, municipal, and county education department and bureaus in GZAR to provide guidance and supervision for TVET institutions, and to manage the program. Training on financial management for TVET institutions will be provided. Procedures and criteria for screening and approving proposals, requirements for planning and reporting, and monitoring and evaluation mechanisms for the program will be upgraded; and systems will be established for managing, monitoring, and reporting environment, involuntary resettlement, and social impacts. A study tour to countries with advanced TVET systems will be organized. An independent third party will be engaged to verify the achievement of DLIs. Additionally, baseline and follow-up surveys for an impact evaluation study will be conducted.

C. Cost and Financing

14. The TA is estimated to cost \$700,000, of which \$600,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-other sources). The key expenditure items are listed in Appendix 1. The government will provide counterpart support in the form of counterpart staff, office space, data, information, and other in-kind contributions.

D. Implementation Arrangements

15. ADB will administer the TA. GED will be the executing agency and will oversee the coordination of its divisions, and other departments and institutions involved in the development and implementation of policies, programs, and actions described in the GZAR Modern TVET System Development Plan. The implementing agency will be the program management office (PMO) established within GED, which will manage and coordinate day-to-day program activities and provide guidance and support to consultants engaged under the TA. The TA will be implemented upon approval of the loan until 31 December 2022. ADB will engage consulting firms and all TA financed goods will be procured in accordance with ADB's Procurement Guidelines (2017, as amended from time to time) and the associated project administration instructions and TA staff instructions.

Table 1: Implementation Arrangements

Aspects	Arrangements		
Indicative implementation period	September 2017–December 2022		
Executing agency	GED		
Implementing agency	PMO		
Consultants	To be selected and engaged by ADB		
	Quality- and cost-based selection method	22.5 person-months	\$446,700
	Individual consultant selection method	18.5 person-months	\$114,450
Procurement	To be procured by consultants		
	Shopping	1 contract	\$8,000
Disbursement	The TA resources will be disbursed following ADB's <i>Technical Assistance Disbursement Handbook</i> (2010, as amended from time to time).		
Asset turnover or disposal arrangement upon TA completion	Purchased equipment will be turned over to the executing agency upon TA completion.		

ADB = Asian Development Bank, GED = Guangxi Education Department, PMO = program management office, TA = technical assistance.

Source: ADB.

16. **Consulting services.** ADB will recruit one international consulting firm for capacity development to provide 15.0 person-months of consulting services (international, 5.0 person-months; national, 10.0 person-months) in the areas of TVET quality, industry partnerships, and regional cooperation; and one national consulting firm for independent third-party verification of the achievement of DLIs to provide 7.5 person-months of consulting services, using the quality- and cost-based selection method with a quality–cost ratio of 90:10 and using simplified technical proposal procedure. ADB will also recruit five individual consultants (national, 18.5 person-months) to build the capacity of TVET institutions in financial management; and assist the PMO in program management, including the management of environment, involuntary resettlement, and social impacts. Lump-sum payments and/or output-based contracts will be considered for consulting services under the TA. The required consulting services are summarized in Table 2

and described in detail (including terms of reference for consultants) in the program implementation document.³

Table 2: Summary of Consulting Services

International Position	Duration (person-months)	National Position	Duration (person-months)
Consulting firm 1: Capacity development			
TVET quality specialist	2.0	TVET quality specialist/team leader	4.0
Industry partnership specialist	1.5	Industry partnership specialist	3.0
Regional cooperation specialist	1.5	Regional cooperation specialist	3.0
Subtotal	5.0		10.0
Consulting firm 2: Independent third-party verification			
		TVET specialist (team leader)	2.5
		TVET specialist	5.0
Subtotal			7.5
Individual consultant			
		Financial management specialist	1.5
		Program management specialist	10.0
		Environment specialist	4.0
		Resettlement specialist	1.5
		Social development and gender specialist	1.5
Subtotal			18.5
Total	5.0		36.0

TVET = technical and vocational education and training.

Source: Asian Development Bank.

17. The purchase of equipment will be undertaken in accordance with ADB's Procurement Guidelines (2015, as amended from time to time) and such equipment will be turned over to the executing agency upon completion of the TA activities. The TA will be disbursed in line with the *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).

18. The TA will be monitored and evaluated based on the implementation of activities and satisfactory delivery of outputs following the agreed timeline and budget. The TA review missions will be the main mechanism to monitor and assess the TA progress. To support monitoring and evaluation, the consulting firm for capacity development will submit an inception report, an interim report, a draft final report, and a final report in English and Chinese to the executing and implementing agencies, and to ADB. The TA outputs will be presented and disseminated to relevant stakeholders in training, workshops, and in other formats.

³ Program Implementation Document (accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President).

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Amount
A. Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	106.8
ii. National consultants	245.4
b. Out-of-pocket expenditures	
i. International and local travel	36.0
ii. Equipment ^b	8.0
iii. Surveys	60.0
iv. Training, seminars and conferences	70.0
ii. Reports and communications	35.0
2. Miscellaneous administration and support costs ^c	10.0
3. Contingencies	28.8
Total	600.0

Note: The technical assistance (TA) is estimated to cost \$700,000, 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 and meeting space, coordination support, data, information, and other in-kind contributions. The value of government contribution is estimated to account for 14.3% of the total TA cost.

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

^b Includes five laptops, one multifunctional printer–photocopier, and one projector.

^c Includes translation and interpretation services.

Source: Asian Development Bank estimates.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/LinkedDocs/?id=49308-002-TARreport>

1. Terms of Reference for Consultants
2. Procurement Plan