



# Technical Assistance Report

---

Project Number: 40047  
November 2006

## People's Republic of China: Technical and Vocational Education and Training Development

Asian Development Bank

## CURRENCY EQUIVALENTS

(as of 31 October 2006)

Currency Unit	–	yuan (CNY)
CNY1.00	=	\$0.124
\$1.00	=	CNY8.08

## ABBREVIATIONS

ADB	–	Asian Development Bank
BOFG	–	Bureau of Finance (Guangdong)
BOFH	–	Bureau of Finance (Hunan)
EA	–	executing agency
EFYP	–	Eleventh Five-Year Program
IA	–	implementing agency
MOF	–	Ministry of Finance
NDRC	–	National Development and Reform Commission
PRC	–	People's Republic of China
TA	–	technical assistance
TVET	–	technical and vocational education and training

## TECHNICAL ASSISTANCE CLASSIFICATION

<b>Targeting Classification</b>	–	General intervention
<b>Sector</b>	–	Education
<b>Subsector</b>	–	Technical education, vocational training, and skills development
<b>Themes</b>	–	Inclusive social development, private sector development, sustainable economic growth
<b>Subthemes</b>	–	Human development, other vulnerable groups, public-private partnerships

## NOTE

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

<b>Vice President</b>	C. Lawrence Greenwood, Jr., Operations Group 2
<b>Director General</b>	H. Satish Rao, East Asia Department (EARD)
<b>Director</b>	R. Wihtol, Social Sectors Division, EARD
<b>Team leader</b>	L. Wu, Principal Social Sector Economist, EARD
<b>Team member</b>	C. Spohr, Social Sector Economist, EARD

## I. INTRODUCTION

1. At the request of the Government of the People's Republic of China (PRC), technical assistance (TA) for technical and vocational education and training (TVET) development was included in the country strategy and program update 2007–2008.<sup>1</sup> The Asian Development Bank (ADB) undertook TA fact-finding in September 2006 and agreement was reached with the Government—including the Ministry of Finance (MOF) and National Development and Reform Commission (NDRC) at the central government level, and the provincial governments of Guangdong and Hunan provinces—on the TA's impact and outcome, outputs, costs and financing, implementation arrangements, and outline terms of reference for consulting services. The parties also agreed that the TA will focus on Guangdong and Hunan provinces as pilot cases. The design and monitoring framework is in Appendix 1.

## II. ISSUES

2. The Government accords high strategic priority to developing TVET during the Eleventh Five-Year Program (EFYP) period (2006–2010) and beyond. This reflects the significant social and economic benefits that improved TVET can generate by helping to (i) address a range of medium and long-term economic and social development issues; and (ii) build a harmonious society, which is a key objective of the EFYP.

3. Strengthening TVET will help to address the severe shortage of skilled workers in the PRC. Nationally, only about 33% of all urban employed are skilled labor, with highly skilled workers/technicians accounting for less than 4%. Moving up the skills ladder from lower-end manufacturing and processing to high value-added industries is crucial for firms to gain competitiveness, and many firms in key areas are suffering from severe shortages of skilled workers. More broadly, increasing the number of skilled workers is essential for the PRC to sustain high economic growth.

4. Improved TVET will help correct structural skills mismatches in the labor market. While severe skills shortages exist, it is estimated that between one quarter and one third of tertiary graduates and several million secondary school graduates cannot find jobs upon graduation each year. This indicates a serious mismatch between labor market demand and supply. Making the TVET system more sensitive and responsive to labor market needs, and strengthening links between TVET and the private sector are essential measures to mitigate this mismatch. In particular, an effective TVET system will produce better suited labor market entrants, and facilitate training/retraining of those switching or in between jobs. This will improve the overall effectiveness of the labor market and help to lower unemployment.<sup>2</sup>

5. Improved TVET will also help to address the skill and employment related issues raised by massive rural–urban migration. Over 200 million surplus laborers have migrated from rural to urban areas, most with limited readily employable skills. Rural–urban migration on this scale is expected to continue at a rate of about 10 million a year for the EFYP period and beyond. A strengthened TVET system can play a vital role in enabling migrant workers to find better jobs with higher and more stable income, as well as contributing to a more orderly and effective process of rural–urban migration and urbanization.

---

<sup>1</sup> Asian Development Bank (ADB). 2006. *People's Republic of China: Country Strategy and Program Update (2007–2008)*. Manila. The TA first appeared in *ADB Business Opportunities* on 19 September 2006.

<sup>2</sup> ADB. 2006. *Technical Assistance to the People's Republic of China for Employment Services for Migrant Workers*. Manila.

6. The existing TVET system in the PRC is far short of addressing these key issues and producing the significant economic and social outcomes required to meet the country's medium and long-term development needs. Key constraints are discussed below.

7. **Inefficient TVET System.** While acute skills shortages exist, what is taught and learned in TVET institutions often does not meet labor market needs. In Guangdong province, where placement rates routinely reach over 90%, TVET graduates often lack practical skills and hands-on experience,<sup>3</sup> indicating that the high placement rate reflects the excess demand rather than the quality of the graduates. Such inefficiencies waste human, financial, and other education resources. They also reveal the underlying lack of focus of the TVET system on imparting employable skills and experience, and weaknesses in labor market linkages.

8. Effective mechanisms need to be developed to improve TVET system efficiency. These include: (i) strengthening labor market linkages through improved flows of labor market information; (ii) strengthening links with employers and industry in the planning and implementation of TVET; (iii) a curriculum and syllabus that reflect market needs, and adequate time allotted for practical training; (iv) improving teacher qualification where many teachers lack the technical skills, practical knowledge, and experience to teach TVET; and (v) strengthening school management and providing incentives to principals and teachers to focus on education and training in line with market needs. Continued efficiency improvements to make TVET more responsive to market needs—turning out graduates with not only practical skills but also the capability to learn, adapt, and solve problems—is a key requirement for the education system in the 21<sup>st</sup> century. Efficiency improvements are a prerequisite for further investments and capacity expansion in TVET, and key to utilizing existing capacity better.

9. **Resource Gaps.** Existing TVET capacity is unable to meet the PRC's present and future needs for skills because of years of underinvestment. The PRC has an estimated total training capacity equivalent to only 10% of its total number of workers, against 30–40% in many advanced economies. The sector also suffers from underfunding. Data from selected provinces show that protracted underfunding has resulted in a lack of buildings, equipment, consumables, and teachers. These shortcomings have contributed to lowering the quality of TVET teaching and learning, and hinder its ability to expand. The central Government has earmarked significant resources (CNY10 billion) during the EFYP period for a number of national goals, including (i) increasing TVET enrolment at the senior secondary level from about 6.0 million to 8.5 million by 2008; (ii) establishing key TVET institutions at the national, provincial, and county levels; and (iii) strengthening national training programs, including one focusing on migrant workers. However, given that TVET is mostly funded by local budgets, considerable financing gaps are expected to remain. It will be essential to explore innovative approaches to resource mobilization to meet the financing needs of TVET.

10. **Weak Public-Private Partnerships in TVET.** While the private sector is active in providing short-term skills and vocational training, its overall role in TVET is modest. Privately owned institutions account for only around 10% of all TVET. Private training agencies tend to be small, and concentrate on training programs that require less equipment and have lower operating costs. The Government encourages private sector participation in TVET but legal, administrative, financial, and other obstacles remain which hinder the growth of private provision of or partnership in TVET. Given the right incentives, it is in the best interest of private enterprises—as main direct beneficiaries—to participate actively in TVET. In recent years, some successful local examples of public-private partnerships in TVET have emerged. It is essential

---

<sup>3</sup> This is consistent with the findings of a recent small-scale survey of employers conducted by the ADB.

to assess these local experiences and distill what is effective and more widely applicable. It is also important for the PRC to learn from good practices in enhancing public-private TVET partnership internationally.

11. **Migrant Workers' Lack of Job and Income Opportunities.** The generally low level of migrant workers' skills is a key reason why most migrant workers remain in a few low-skilled industries with little prospect of upward mobility, and is an underlying cause of many social issues relating to migrant workers in urban areas. TVET can provide improved skills, knowledge, and experience for gainful urban employment. However, only about 20% of migrant workers currently receive any training and most is very basic (as short as 15 days). How to provide migrant workers with TVET is a key issue to be explored. Public sector assistance, including interprovincial arrangements, may be necessary to ensure that (i) training provided to migrant workers in their home province be relevant to job market needs in host provinces, and (ii) migrant workers have easy and nondiscriminatory access to training and jobs in host provinces. This will benefit migrant workers themselves, reduce labor market transaction costs, and ensure that migration flows are more adequately supported.

### III. THE TECHNICAL ASSISTANCE

#### A. Impact and Outcome

12. The impact of the TA will be an effective TVET system to support employment and labor markets in the PRC. The outcome of the TA will be consideration by higher authorities of the central and selected provincial governments of key policy recommendations for improving and strengthening TVET.

#### B. Methodology and Key Activities

13. The TA will review TVET in two provinces: (i) a key industrial province heavily reliant on migrant labor, and (ii) a less developed central province that serves as a source of migrant workers. Guangdong is among the most developed coastal provinces and faces severe skills shortages which constrain upgrading its manufacturing and processing into higher value-added industries. The experience in Guangdong will have direct relevance for other advanced coastal provinces. Hunan is a province in the central region where economic development lags behind that of the coastal areas. Hunan's experience and lessons in TVET development will be useful to central and western provinces with similar conditions. Hunan is also a major source of supply of migrant workers to Guangdong. Working with both provinces on partnership building will enable the TA to take a broad and innovative approach to addressing issues related to migrant workers.

14. The review, analysis, and recommendations for improving TVET will be reflected in the main TA report. TA outputs will include (i) key policy recommendations formulated on measures and mechanisms for improving TVET for Guangdong and Hunan provinces, some of which will have wider applicability in the PRC; and (ii) a publication on key TA findings and recommendations. The policy recommendations will be drawn from the main TA report's analysis and assessment of key issues identified and discussed (paras. 2–11). Policy measures and mechanisms identified for implementation will be costed and prioritized. Key TA findings and policy recommendations will be packaged as knowledge products for wide dissemination among stakeholders and the general public through a variety of media including websites, printed materials, and at conferences.

15. Two surveys will be conducted and their results analyzed early during TA implementation. One survey will be on migrant workers' participation in TVET, with a view to (i) better understanding the status, issues, and challenges to more active participation by migrant workers in TVET; and (ii) identifying effective means and measures to provide better jobs and income for migrant workers through TVET. The other survey will be on TVET financing, aimed at identifying solutions to issues in mobilizing adequate resources for financing TVET, including willingness to pay on the demand side, and ways of enhancing public-private partnership.

16. Four workshops and one national conference will be held. The workshops will serve as a venue and platform for (i) sharing TA findings during implementation, (ii) building consensus among the stakeholders, and (iii) consultation and feedback. The workshops will be issues-oriented and are tentatively scheduled to be held, separately in Guangdong and Hunan, at TA inception and midterm. The national conference will be held towards the end of TA implementation to (i) disseminate the TA's findings, (ii) exchange experiences and information on TVET development within PRC and in other countries, and (iii) provide inputs for further refining of the TA reports and outputs.

17. A study visit will be conducted early during TA implementation to offer key officials (i) an opportunity to observe first-hand good practices in countries with successful experience of TVET development, and (ii) a platform for exchanging experiences and lessons learned with other countries. The participants will include central and provincial government officials directly involved in policy making and implementation of TVET.

### **C. Cost and Financing**

18. The total cost of the TA is estimated at \$800,000 equivalent, of which \$600,000 will be financed on a grant basis by ADB's TA funding program. The Government's contribution, estimated at \$200,000 equivalent, will be in kind and cover remuneration of counterpart staff, office space and meeting venues, furniture, administrative support, and logistics. Detailed cost estimates and the financing plan are in Appendix 2.

### **D. Implementation Arrangements**

19. The TA will be implemented over a period of 8 months from January to September 2007. The Bureau of Finance of Guangdong Province (BOFG) will be the Executing Agency of the TA, responsible for the overall execution and coordination of TA activities. Within BOFG, a TVET project group will be established with members from relevant agencies including the Provincial Development and Reform Commission, Bureau of Education, and Bureau of Labor and Social Security. A key responsibility of BOFG is to coordinate closely and cooperate with Hunan Province. The Bureau of Finance of Hunan Province (BOFH) will be the Implementing Agency of the TA, responsible for the effective implementation of the TA activities to be carried out in Hunan. Within BOFH, a TVET project group will be established with members from Provincial Development and Reform Commission (PDRC), Bureau of Education (BOE), Bureau of Labor and Social Security (BOLSS), and other relevant agencies. A key responsibility of BOFH is to coordinate closely and cooperate with BOFG.

20. BOFG and BOFH will be responsible for providing information, coordination/liaison, and other conditions necessary for the consultants to complete their tasks successfully—including suitably furnished office space with utilities and telecommunication access; and materials, data, and documents required by the TA. Prior to the commencement of TA activities in their

respective provinces, BOFG and BOFH will each appoint a provincial project coordinator who will be responsible for liaising and coordinating within their respective provinces, between the two provinces, and with ADB and the consultant team. ADB will establish an advance payment facility with the BOFG and BOFH to facilitate timely implementation of the TA in line with ADB's *Guidelines for Disbursement of Technical Assistance Grants*.

21. A national project steering committee will provide overall guidance and coordination, including interprovincial and interagency coordination, to ensure effective and timely project implementation. The project steering committee will be chaired by a representative from MOF, with members from NDRC, Ministry of Education, and Ministry of Labor and Social Security, and will meet as needed.

22. A team of international and national consultants will be engaged for a total of 34 person-months (6 person-months from 1 international consultant and 28 person-months from 6 national consultants) in the fields of sector planning and development, TVET sector reform and development, private sector participation, TVET financing and resource mobilization, labor market linkages, and TVET for migrant workers. In addition to policy and sector expertise, the consultants will have experience on issues specific to Guangdong and/or Hunan provinces. The international consultant will be the team leader and one national consultant will be the deputy team leader. The team leaders will be responsible for the quality and timely delivery of all TA deliverables and outputs, including the inception, midterm, and draft final TA reports; as well as finalizing key TA recommendations in a knowledge product prior to TA completion.

23. The consultants, including the implementation of an overseas study visit to be funded under the TA, will be engaged on an individual basis in accordance with ADB's *Guidelines on the Use of Consultants*. TA reports prepared by the consultant will be presented in English and Chinese. Outline terms of reference for the consultants are in Appendix 3.

#### **IV. THE PRESIDENT'S DECISION**

24. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$600,000 on a grant basis to the Government of the People's Republic of China for Technical and Vocational Education and Training Development, and hereby reports this action to the Board.

## DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p><b>Impact</b></p> <p>An effective TVET system to support employment and labor markets in the PRC</p>	<p>Annual national enrolment of TVET at senior secondary level reaches 8.5 million by 2010 from 6.5 million in 2005</p> <p>Total enrolment of TVET at senior secondary level increases from 1.0 million in 2005 to 1.7 million by 2010 in Guangdong, and from 0.8 million in 2005 to 1.0 million by 2010 in Hunan</p> <p>Placement rates in TVET in Guangdong and Hunan provinces maintain at over 90%</p> <p>An 8% annual increase in average wages for migrant workers in Guangdong province starting in 2010</p>	<p>Central and provincial statistics</p> <p>Other official statistics</p>	<p><b>Assumptions</b></p> <ul style="list-style-type: none"> <li>• TVET continues to be the policy and reform priority of the central Government and Guangdong and Hunan provinces</li> <li>• Central and provincial governments in Guangdong and Hunan adopt key TA recommendations</li> </ul> <p><b>Risk</b></p> <ul style="list-style-type: none"> <li>• Inadequate resources are allocated to replicate TA outcomes in other provinces as part of national efforts to improve TVET</li> </ul>
<p><b>Outcome</b></p> <p>Consideration by higher authorities of the central and provincial governments of key TA policy recommendations for improving TVET</p>	<p>Main policy recommendations submitted by November 2007 to the central and provincial governments for consideration</p>	<p>Technical assistance completion report</p> <p>Government feedback post-TA implementation</p>	<p><b>Assumption</b></p> <ul style="list-style-type: none"> <li>• TA key recommendations are supported by Guangdong as EA and Hunan as IA, as well as the central Government</li> </ul> <p><b>Risk</b></p> <ul style="list-style-type: none"> <li>• Change in Guangdong and Hunan's policy directions on TVET development</li> </ul>
<p><b>Outputs</b></p> <p>1. Key policy recommendations formulated on measures and mechanisms for improving TVET for Guangdong and Hunan provinces</p> <p>2. Publication on key TA findings and recommendations prepared and widely disseminated</p>	<p>Specific recommendations for TVET development in Guangdong and Hunan provinces ready by end of September 2007, including improving (i) TVET (internal and external efficiency, capacity expansion, and public-private partnerships); (ii) migrant workers' effective participation in TVET in Hunan and Guangdong; and (iii) TVET financing</p> <p>National conference on TVET development held</p> <p>Dissemination of TA recommendations through publications and websites</p>	<p>Inception report with detailed work plan submitted</p> <p>Midterm report submitted</p> <p>Draft final report revised</p> <p>Main report finalized</p> <p>Conference held and report submitted</p>	<p><b>Assumptions</b></p> <ul style="list-style-type: none"> <li>• Effective cooperation from selected provincial governments, and effective coordination between Guangdong as EA and Hunan as IA</li> <li>• Availability of information needed for TA analysis</li> <li>• Active participation of all stakeholders in workshops and the national conference</li> </ul> <p><b>Risks</b></p> <ul style="list-style-type: none"> <li>• Lack of experience of ADB procedures and requirements on the part of provincial officials participating in the TA</li> <li>• Lack of participation by</li> </ul>

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
	Each workshop held according to the schedule as set in the inception report, with seminar report submitted no later than 1 week after it is held		migrant workers and other stakeholders in the surveys to be conducted under the TA
<b>Activities with Milestones</b>  <b>1. Review and analysis of issues</b>  1.1 Prepare TA inception report and hold TA inception within month 1, including a detailed outline of the main TA report and work schedule of each consultant 1.2 Prepare TA midterm report by month 4 1.3 Conduct analysis and assessment of TVET systemic issues during month 1 and present initial findings at midterm review, including: (i) comprehensive analysis and assessment of issues, (ii) identifying constraints and opportunities for TVET development, and (iii) initial recommendations for improving TVET system 1.4 Introduce international experience in a systematic manner at midterm review 1.5 Prepare draft TA final report by end of month 7 1.6 Revise and submit TA final report by end of month 8 after consulting with ADB, EA, IA, and MOF; with finalized analysis, assessment, constraints, and recommendations for improving TVET systems as specified in the terms of reference  <b>2. Preparation, conduct, and result analysis of surveys</b>  2.1 Design the surveys on migrant workers and TVET financing by end of month 1 2.2 Conduct the surveys before month 3 2.3 Analyze survey results by mid-month 3, to be incorporated in TA midterm report  <b>3. Organization and facilitation of four workshops</b>  3.1 Prepare and facilitate one workshop each at/after TA inception, midterm, and prior to the national conference 3.2 Prepare and submit a workshop report for each workshop held  <b>4. Organization and conduct of the study visit</b>  4.1 Organize the study visit, including (i) selection of host country, organizations, and timing of the visit, (ii) study visit participants, and (iii) contents including resource speakers and other key activities of the visit 4.2 Conduct the visit before month 3 4.3 Prepare and submit a report on the visit, including any follow-up activities and plans  <b>5. Organization and facilitation of the final conference for dissemination of main TA findings and public consultation</b>  5.1 Prepare the conference, including identifying national and international participants and speakers 5.2 Hold the conference before mid-month 8 5.3 Prepare and submit conference report by mid-month 8, including key recommendations for improving the draft final TA report, public dissemination, and any other follow-up activities and plans			<b>Inputs</b>  ADB: \$600,000  <ul style="list-style-type: none"> <li>• Consulting services: \$370,000</li> <li>• Survey: \$50,000</li> <li>• Workshops and conference: \$60,000</li> <li>• Study visit: \$60,000</li> <li>• Contingencies: 60,000</li> </ul> Government: \$200,000  <ul style="list-style-type: none"> <li>• Office and transport: \$70,000</li> <li>• Counterpart staff: \$70,000</li> <li>• Others: \$60,000</li> </ul>

ADB = Asian Development Bank, EA = executing agency, IA = implementing agency, MOF = Ministry of Finance, PRC = People's Republic of China, TA = technical assistance, TVET = technical and vocational education and training.

**COST ESTIMATES AND FINANCING PLAN**  
(\$'000)

<b>Item</b>	<b>Total Cost</b>
<b>A. Asian Development Bank (ADB) Financing<sup>a</sup></b>	
1. Consultants	
a. Remuneration and Per Diem	
i. International Consultants	140.0
ii. National Consultants	170.0
b. International and Local Travel	40.0
c. Reports and Translation	20.0
2. Survey	50.0
3. Workshops (4), and Conference (1)	60.0
4. Study Visit	60.0
5. Contingencies	60.0
<b>Subtotal (A)</b>	<b>600.0</b>
<b>B. Government Financing</b>	
1. Office Accommodation and Transport	70.0
2. Remuneration and Per Diem of Counterpart Staff	70.0
3. Others	60.0
<b>Subtotal (B)</b>	<b>200.0</b>
<b>Total</b>	<b>800.0</b>

<sup>a</sup> Financed by ADB's technical assistance funding program.  
Source: ADB estimates.

## OUTLINE TERMS OF REFERENCE

1. The technical assistance (TA) will require the services of seven consultants for a total of 34 person-months, including one international consultant and six national consultants, over a period of 8 months during TA implementation. The international consultant will be the team leader. The national specialist on technical and vocational education and training (TVET) sector planning and development will be the deputy team leader.
2. The team leader and TVET sector planning and development expert (international, 6 person-months) will do the following.
  - (i) Coordinate with the deputy leader in submitting an inception report within 1 month after TA implementation begins to the Bureau of Finance of Guangdong (BOFG) and Bureau of Finance Hunan (BOFH), the Executing Agency (EA) and Implementing Agency (IA), and Asian Development Bank (ADB). The report will include (a) a clear delineation of responsibilities among team members and national and local government counterparts in all TA activities, including the study visit; (b) a work plan detailing each team members' inputs and delivery dates; (c) an outline of the main TA report and schedule; and (d) the design and plans for surveys on migrant workers and TVET financing.
  - (ii) Lead in conducting a comprehensive assessment of the TVET system of Guangdong and Hunan provinces. The in-depth analysis should include an introduction to the broad national and provincial policy environment and framework; institutional (financial, administrative, etc.) assessment at the central, provincial, and local levels, as well as specific areas of TVET including capacity, management at the sector and school levels, curriculum and syllabus, teacher and teaching, learning and teaching materials, labor market linkages (institutional setup, information system, and technology, etc.), and participation of migrant workers in TVET.
  - (iii) Lead in conducting a comprehensive assessment of private sector participation in TVET in Guangdong and Hunan provinces, focusing in particular on its role in (a) TVET institutions, (b) participating in the TVET process, and (c) related financial, fiscal, and other policies and incentives.
  - (iv) Be responsible for the analysis and assessment of all issues relating to financing TVET development, including (a) the institutional and administrative background and environment in the national and specific provincial contexts, (b) support data and statistical analysis and survey results, (c) careful and comprehensive assessment of cost recovery in TVET development, (d) assessment of the applicability in the People's Republic of China (PRC) of fiscal and financial incentives used by other countries, and (e) financing issues relating to migrant workers' participation in TVET.
  - (v) Be responsible for, based on (ii), (iii), and (iv) above, identifying constraints and opportunities for improving the TVET system in the provinces, administratively, financially, and institutionally; and for providing recommendations on the effective mechanisms and measures for such improvements. The analysis and recommendations should cover measures and mechanisms (cross-provincial if necessary) targeting more active and effective migrant workers' participation in TVET. The recommendations made should be clear and specific, costed, and prioritized for implementation.
  - (vi) Lead in systematically introducing advanced international experience, including public-private partnership on TVET. Materials collected should be widely disseminated at workshops and/or compiled in a separate report attached to the

main TA report. The outline of this report should be presented and provided at TA inception.

- (vii) Be responsible for ensuring the quality of the surveys on migrant workers and participation in TVET and TVET financing to be conducted early in TA implementation, especially with regard to the methodology used in survey design and implementation, and the systematic review and analysis of survey results.
- (viii) Be responsible for coordinating with other multilateral and bilateral development partners of the PRC working on related/similar issues and topics.
- (ix) Be responsible for (a) ensuring the quality of the final TA main report, (b) preparing an executive summary of the final TA report as the basis for policy recommendations to be submitted to higher authorities of the Government and ADB, and (c) preparing and finalizing the knowledge products for a publication.
- (x) Be responsible for the quality of all TA activities.

3. The national specialist on TVET sector planning and development and deputy team leader (8 person-months) will do the following.

- (i) Assist the team leader in preparing and submitting to BOFG, BOFH, and ADB an inception report as defined in (i) para. 2.
- (ii) Work with the team leader on (ii), (iii), and (iv) as specified in his/her terms of reference. In particular, the deputy team leader will prepare a comprehensive analysis and assessment of the policy, institutional, administrative, and financial aspects of the TVET system in Guangdong and Hunan provinces. Based on this analysis, the assessment will (a) clearly identify constraints and opportunities; and (b) provide specific and clear recommendations, costed with prioritized implementation schedules, on mechanisms and measures for improving TVET systems in Guangdong and Hunan provinces—including those to promote private sector participation in TVET, TVET financing, and those to benefit migrant workers in TVET participation.
- (iii) Work together with all other team members, providing coordination, support, and assistance as necessary, as well as quality control of their outputs—including providing expert opinion on the impact of their recommendations on TVET development in Guangdong and Hunan provinces.
- (iv) Support (a) the national specialist on training and migrant workers in designing and conducting the survey, systematically analyzing survey results, and preparing policy recommendations on improving migrant workers' participation in TVET across Guangdong and Hunan provinces; and (b) the TVET financing specialist on similar tasks in the survey on TVET financing.
- (v) Be responsible for coordinating with relevant government agencies—including Ministry of Finance (MOF), National Development Reform Commission (NDRC), EA, and IA in Guangdong and Hunan provinces, and other central or local agencies—to ensure effective and timely implementation of all TA activities.
- (vi) Be responsible for the coordination, finalization, and timely submission of all reports, including the draft final report and other reports, all key research reports, and TA implementation reports for submission to BOFG, BOFH, and ADB.
- (vii) Assist the team leader in preparing and finalizing the executive summary and the knowledge products.
- (viii) Be responsible for the timely and quality delivery of all workshops/conference; and act as team leader when the team leader is not in the field or by agreement with the BOFG and BOFH, with prior approval from ADB.

4. The national specialist on TVET, Guangdong province (5 person-months) will do the following.

- (i) Be responsible for preparing a comprehensive analysis and assessment of TVET reform and development in Guangdong. This should couch the analysis in the broad national and provincial TVET development framework and focus on the whole range of TVET sector issues, including internal efficiency, external efficiency, and private sector participation. The assessment of private sector participation should include school management and advising, curriculum and syllabus, course contents, teaching, placement, practicum, and privately owned institutions. It should include an in-depth assessment of the capacity needs of the sector, clearly identifying the resource needs for capacity expansion with and without efficiency gains.
- (ii) Based on (i) above, clearly identify constraints and opportunities to reach the national and provincial TVET goals; propose concrete and integrated policy measures and mechanisms for implementation; prioritize and cost these measures and mechanisms (under different scenarios and various fiscal and financial parameters) in a time-bound implementation plan.
- (iii) Assist the team leaders in all issues relating to TVET reform and development, and provide expert opinion and suggestions on them.
- (iv) Prepare materials for and make presentations at workshops and conference.
- (v) Work together with the specialists focusing on TVET in Hunan and on migrant workers training issues to present the research in an integrated manner.
- (vi) Work with the TVET financing specialist on the design, implementation, and analysis of the survey on TVET financing; work on other tasks as assigned by team leaders.

5. The national specialist on TVET, Hunan province (4 person-months) will do the following.

- (i) Be responsible for preparing a comprehensive report on TVET development in Hunan. The report should include an in-depth assessment of TVET in Hunan, its status, institutional setup, financing, and development plans and prospects; it should identify the sector constraints relative to the medium and long-term needs of the province.
- (ii) One focus of the report is on migrant workers' participation in TVET. The report should provide a detailed account of practices and experiences at all levels and all forms of TVET, describing the financing aspects of the issue—with the migrant workers, public sector and private sector as the main stakeholders—identifying key constraints in the process, especially public-private partnerships.
- (iii) Based on (i) and (ii), recommend measures and mechanisms for improving TVET in Hunan over the medium and long term, emphasizing internal and external efficiency, labor market linkages, capacity expansion, as well as effective institutional, administrative, and financing measures and mechanisms needed. On more active migrant workers' participation in TVET, the recommendations should clearly identify mechanisms of public-private partnerships benefiting migrant workers, the public sector, TVET institutions, and the private sector. The recommendations should be costed, and prioritized with time-bound implementation plans; recommendations relating to migrant workers may include interprovincial institutional cooperation and mechanisms.
- (iv) Work closely with the specialist on migrant workers and training (para. 7 below) on designing and conducting the survey on migrant workers' participation in

- TVET in Hunan and Guangdong.
- (v) Work closely with the specialist on TVET issues in Guangdong to ensure that the findings in Hunan will be integrated as a component of the main report.
  - (vi) Prepare and make presentations at workshops and the conference; assist the team leaders in all preparations for workshops to be held in Hunan.
  - (vii) Work together with other members of the team on other tasks as assigned by the team leaders, including the TVET financing specialist on the survey; undertake other tasks as assigned by the team leaders.
6. The national specialist on TVET financing and economist (4 person-months) will do the following.
- (i) Be responsible for the analysis and assessment of all issues relating to TVET financing. This work should (a) provide the proper institutional and administrative background and environment both in the national and specific provincial contexts; (b) use proper support data and results from statistical analysis and survey results; (c) provide an in-depth analysis of the cost recovery nature, status, and prospects for TVET in Guangdong and Hunan; (d) assess the applicability in the PRC of fiscal and financial incentives used by other countries; and (e) include a focus on financing issues relating to migrant workers' participation in TVET. This analysis should be integrated in one comprehensive analysis under the TA.
  - (ii) Be responsible for the plan, design, conduct, and analysis of a survey on TVET financing and related issues, including gauging the issue of willingness to pay for TVET.
  - (iii) Provide, based on (i) and (ii) above, recommendations of concrete measures and mechanisms for improving TVET financing in the context of provincial TVET development plans over the medium and long term. The recommendations should be costed—with fiscal, financial sustainability analysis as support—and have a prioritized implementation schedule.
  - (iv) Work with other team members and provide expert opinion on financing, fiscal, and financial implications of all work conducted under the TA.
  - (v) Be responsible for the preparation and presentation of TVET financing issues, including cost recovery and related financial and fiscal policies at workshops; assist the team leaders in all other TA activities as assigned.
7. The national specialist on migrant workers and training (4 person-months) will do the following.
- (i) Be responsible for the design, planning, and conduct of the survey on training and migrant workers.
  - (ii) Be responsible, based on (i) above, for preparing a comprehensive analysis and assessment of migrant workers' participation in TVET in the two provinces, clearly identifying institutional, administrative, financial, and other social and economic constraints; and recommending concrete measures and mechanisms for addressing these constraints, including feasibility. The analysis should pay special attention to improving the participation and effectiveness of TVET for migrant workers from Hunan to better their job and income opportunities in Guangdong including establishing formal provincial partnerships/arrangements for assisting more orderly and effective migration from Hunan to Guangdong. Private sector participation and its complementarity to the public sector should be a focus of the analysis and recommendations. All recommendations should be

- costed, with financial and fiscal sustainability analysis, and have a prioritized implementation schedule.
- (iii) Work closely together with the TVET specialist focusing on Hunan and the TVET specialist focusing on Guangdong to ensure that the analysis and recommendations will cover migrant workers' participation in TVET in both the source and destination province.
  - (iv) Be responsible for preparing and making presentations at workshops on all topics relating to training and migrant workers.
  - (v) Work with other team members and provide expert opinion on all issues relating to migrant workers' participation in TVET in Hunan and Guangdong provinces.
  - (vi) Assist the team leaders in other tasks of the TA as assigned by the team leaders.
8. The national specialist on national TVET development policies, strategies, and reforms (3 person-months) will do the following.
- (i) Be responsible for preparing a comprehensive report on national TVET reform and development plans over the medium and long term, clearly spelling out the overall policy framework for TVET development; and identifying goals and targets, and resource and other constraints for reaching them.
  - (ii) Be responsible for ensuring that all TA work to be implemented in the provinces will be consistent with national policies, goals, and targets.
  - (iii) Be responsible for providing expert opinion and expertise on TA work with national ramifications, including cost recovery in TVET, private sector participation, and other TVET sector issues.
  - (iv) Be responsible for coordinating with relevant central government agencies including MOF, NDRC, Ministry of Education, and Ministry of Labor and Social Security on policy issues relating to TVET reform and development.
  - (v) Be responsible for preparing and presenting relevant report and materials at workshops and the conference, and coordinating with central government agencies for participating in these activities; undertake other tasks as assigned by the team leaders.