



Technical Assistance Report

Project Number: 49017-001
Policy and Advisory Technical Assistance (PATA)
August 2015

People's Republic of China: Policy Analysis and Assessment of Reforming Education Mode for Promoting Employment of Graduates in Applied Tertiary Institutions

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 30 June 2015)

| | | |
|---------------|---|------------|
| Currency unit | – | yuan (CNY) |
| CNY1.00 | = | \$0.1613 |
| \$1.00 | = | CNY6.20 |

ABBREVIATIONS

| | | |
|-----|---|------------------------------|
| ADB | – | Asian Development Bank |
| HEI | – | higher education institution |
| MOE | – | Ministry of Education |
| PRC | – | People’s Republic of China |
| TA | – | technical assistance |

NOTE

In this report, “\$” refers to US dollars.

| | |
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POLICY AND ADVISORY TECHNICAL ASSISTANCE AT A GLANCE

| | | | |
|---|--|--|-----------------------|
| 1. Basic Data | | Project Number: 49017-001 | |
| Project Name | Policy Analysis and Assessment of Reforming Education Mode for Promoting Employment of Graduates in Applied Tertiary Institutions | Department /Division | EARD/EASS |
| Country Borrower | China, People's Republic of People's Republic of China | Executing Agency | Ministry of Education |
| 2. Sector | | ADB Financing (\$ million) | |
| ✓ Multisector | ADB's corporate management, policy and strategy development | | 0.40 |
| | | Total | 0.40 |
| 3. Strategic Agenda | | Climate Change Information | |
| Inclusive economic growth (IEG) | Pillar 2: Access to economic opportunities, including jobs, made more inclusive | Climate Change impact on the Project | Low |
| 4. Drivers of Change | | Gender Equity and Mainstreaming | |
| Governance and capacity development (GCD) | Institutional development | Effective gender mainstreaming (EGM) | ✓ |
| Knowledge solutions (KNS) | Application and use of new knowledge solutions in key operational areas Knowledge sharing activities Pilot-testing innovation and learning | | |
| 5. Poverty Targeting | | Location Impact | |
| Project directly targets poverty | Yes | Rural | High |
| Geographic targeting (TI-G) | Yes | Urban | Low |
| 6. TA Category: | B | | |
| 7. Safeguard Categorization | Not Applicable | | |
| 8. Financing | | | |
| Modality and Sources | | Amount (\$ million) | |
| ADB | | 0.40 | |
| Policy and advisory technical assistance: Technical Assistance Special Fund | | 0.40 | |
| Cofinancing | | 0.00 | |
| None | | 0.00 | |
| Counterpart | | 0.00 | |
| None | | 0.00 | |
| Total | | 0.40 | |
| 9. Effective Development Cooperation | | | |
| Use of country procurement systems | | | No |
| Use of country public financial management systems | | | Yes |

I. INTRODUCTION

1. The Government of the People's Republic of China (PRC) has requested policy and advisory technical assistance (TA) from the Asian Development Bank (ADB) to support the Ministry of Education (MOE) in reforming modes of education in applied tertiary institutions to promote graduate employment.¹ The reforms will focus on local higher education institutions (HEIs) to improve linkages with local economies, and they will help improve the desirability of tertiary technical and vocational education among students. The TA will support the MOE in identifying reform pathways adapted to local contexts.² During a reconnaissance mission conducted in March 2015, the ADB project team conducted consultations and reached agreement with the MOE on the TA project's impact, outcome, outputs, costs, implementation and financing arrangements, and the terms of reference for consultants. The design and monitoring framework is in Appendix 1.

II. ISSUES

2. The number of university graduates in the PRC has increased from 2.12 million in 2003 to 7.49 million in 2015 as a result of both demographic trends and the government's decision in 1999 to expand tertiary education to stimulate the economy.³ Given the PRC's slowing economic growth and its transformation into a service-oriented economy driven by domestic consumption, policy makers are increasingly concerned about job creation being too weak to keep pace with the rising numbers of graduates. The unemployment rate for recent college graduates aged 21–25 is 16%, which (i) is nearly four times that of blue-collar workers in urban areas, and (ii) masks significant bias in rural and female student recruitment. In addition, as the economy transitions toward higher levels of economic development, policy makers are preoccupied with widening skills gaps. Many university graduates remain underemployed several months after gaining employment, and employers are often unable to find employees with relevant and appropriate skills.

3. National priorities for the education sector were reiterated during the National People's Congress held in March 2015. This was followed by State Council legislation issued on 30 May 2015.⁴ Two key priorities for higher education have emerged. The first is to improve policies aimed at stimulating employment and supporting self-employment and entrepreneurship among college and university graduates. The government has already begun implementing related policies such as (i) providing employment opportunities in grassroots communities, (ii) encouraging small- and medium-sized enterprises and nonpublic enterprises to employ college graduates, (iii) encouraging key state-owned enterprises and research projects to recruit college graduates, (iv) encouraging college graduates to start their own business, (v) improving or reforming employment services available to college graduates, (vi) enhancing employability, and (vii) assisting disadvantaged college graduates in job placement.⁵ The government is

¹ The overall objective is the transformation of more than 600 HEIs into polytechnics, but the MOE has indicated that it will pilot transitions first in selected HEIs. Applied tertiary institutions or polytechnics are institutions that offer degrees in paraprofessional majors and a variety of employment-oriented majors.

² The TA first appeared in the business opportunities section of ADB's website on 11 June 2015.

³ Government of the People's Republic of China, Ministry of Education. 2013. *Key Education Statistics*. Beijing.

⁴ Government of the People's Republic of China, General Office of the State Council. 2015. *State Council Gazette Issue No. 15. "Implementation Opinions of the General Office of State Council on Deepening the Reform of the Education of Innovation and Entrepreneurship in Institutions of Higher Education."* Serial No. 1518. Beijing.

⁵ These employment opportunities include (i) the "three supports and one assistance" plan, which focuses on education service, agriculture activities, public health service, and poverty reduction in rural areas; and (ii) the "special posts of rural teachers" plan, including through the "college students volunteer to the west" program.

increasing its attention on self-employment and entrepreneurship as a means of promoting employment and fostering innovation.

4. The second priority is to reform HEIs so they are better able to contribute to these policies and respond to current as well as future economic and social needs. Specific emphasis is put on local HEIs (particularly lower tier universities) to improve education quality and relevance, particularly to strengthen local economies and rural–urban transitions. Developing and retaining talent in the western provinces and in rural areas is part of the country’s education sector policy, an important feature of which is the strengthening of applied HEIs. Under this approach, a number of local HEIs are being encouraged to transform into applied colleges or polytechnics. The objective is to promote education opportunities that better prepare students for gainful employment. Although the policy to transform HEIs into applied colleges or polytechnics has been set, the modalities of its implementation have yet to be established, as reforming existing HEIs is a complex undertaking that the MOE intends to pilot first.

5. The reforms are also expected to help change students’ perceptions of higher education and subsequent employment opportunities. While they currently favor university education over tertiary technical and vocational education and training, tertiary technical and vocational education and training will become more attractive to students by improving the linkages between the academic and technical streams and by strengthening applied colleges or polytechnics. A more applied tertiary education would better prepare graduates for employment and could help them adjust their employment expectations to match current labor market realities.⁶

6. The proposed TA is a timely response to the government’s current priorities. It will focus on the institutional reform of HEIs and support the transition of selected HEIs in the western and southern provinces toward applied colleges. By strengthening such HEIs, it will encourage graduate employment in local urban and rural areas, and in lagging central and western regions. The TA will also facilitate dialogue among stakeholders, particularly among colleges, employers, graduates, and local policy makers. The TA is intended to provide guidance on the deployment of the applied college concept in the PRC and showcase successful examples, which will contribute to the national policy framework for reforming tertiary education. The TA will also be useful to other countries in the region.

III. THE POLICY AND ADVISORY TECHNICAL ASSISTANCE

A. Impact and Outcome

7. The impact will be an increase in employment-ready college graduates in the targeted provinces and sectors and a shift in students’ attitudes regarding higher education and employment. The outcome will be successful planning for the transformation of HEIs into applied colleges, which will be evidenced by the MOE’s adaptation of guidelines and a road map for the transformation of selected HEIs into applied colleges by March 2017.⁷ The recommendations for implementing the transformation plan will also propose ways to incorporate impact evaluation mechanisms in the process to better inform policy makers. Given

⁶ A. Moorman. 2011. Changing Student Expectations and Graduate Employment. *Frontiers of Education in China: Case Studies from Xi’an, Shaanxi Province*. 6 (4). pp. 521–548.

⁷ Under this TA, about eight to 10 HEIs will be selected from among two to three provinces in the southern and western regions. The MOE recommended (and ADB agreed) considering HEIs in Baise, where there is an ADB loan project ongoing, and western provinces such as Xinjiang, Gansu, or Qinghai.

the importance of fostering employment in the western and central parts of the country to promote balanced development, the proposed TA will concentrate on the regions and sectors most likely to contribute to local economic development and generate employment locally (e.g., local industry, modernized agriculture, medical occupations). The TA will determine how to replicate proposed HEI reforms and adapt to local contexts, and it will seek out good practices developed in other parts of the PRC as well as around the world. The TA will pay particular attention to small cities and rural areas to assess how HEIs could assist in the modernization of agriculture and green jobs, or in the development of services, including elderly care, information and communication technology, and e-commerce, to support social and economic improvement.

B. Methodology and Key Activities

8. The TA will conduct in-depth stakeholder consultations to understand the socioeconomic context and institutional setting in which HEIs operate, and review the relevance and applicability of national and international experience in developing applied colleges (e.g., community colleges, polytechnics). Drawing on the above findings, the TA will identify good practices for transitioning HEIs toward applied colleges, and assemble the analyses and recommendations in eight to 10 case studies.

9. The proposed TA will also address the specific employment experiences of women, rural migrants, and ethnic minorities. For instance, working women's needs for child and elderly care may affect their career path. Additionally, stereotypes and social factors influence fields of study; employment legislation and entitlements; and entrepreneurship capacities (e.g., access to credit) and prospects of women, rural migrants, and minorities. Similarly, social networking and the creation of social capital are important dimensions of successful job search and business creation, but are often overlooked by policy makers. Awareness of these issues and how, if at all, HEIs integrate them when developing employment services for their graduates have an important bearing on HEIs' ability to foster equity. The TA will identify strategies for HEIs to improve linkages and foster collaboration with local economies, and contribute to employment (and self-employment) generation. The TA will also identify opportunities for HEIs to encourage applied research with local companies (e.g., in support of modernizing agriculture) to help accelerate the contribution of local economic development and employment generation.

10. The TA will have three outputs: (i) local HEIs mapped, (ii) selected HEIs and their capacity to implement the transition toward a polytechnic model assessed, and (iii) recommendations to guide the phased strategy of the MOE and provincial governments to implement the transition toward a polytechnic model provided.

11. Output 1 will provide a detailed mapping of the current local HEI system in the PRC to inform the selection process of the HEIs that will be featured in the case studies. The mapping will be established through a desk review and in-depth consultations with the MOE and local stakeholders, including review of any other planning or strategy work being undertaken on HEI transition guidelines. It will identify the pilot cases and sectors that will most likely contribute to local economic development and generate employment locally. At the close of the initial stakeholder consultation phase, the eight to 10 HEIs to be included in the case studies will have been selected and will include HEIs focusing on various sectors (such as medical services, agriculture, and industrial organization).

12. Output 2 will draw on the findings of output 1 and consist of a detailed assessment of the selected HEIs and their capacity to implement the transition toward a polytechnic model. A midterm review workshop will be organized with key stakeholders to provide a platform to share

a provisional report, preliminary findings from the initial stakeholder consultation phase, and the institutional analyses of the selected HEIs. The workshop will bring together stakeholders to strengthen HEI networks and enable horizontal knowledge and experience sharing.

13. Output 3 will provide a set of comprehensive recommendations to guide the phased strategy of the MOE and provincial governments to implement the transition toward applied colleges. Sector-specific suggestions (e.g., for colleges focusing on medical services, agriculture, and industry) and recommendations to address gender issues relating to higher education and the transition toward employment will be included whenever relevant. As reliable impact evaluation helps validate and strengthen findings, the recommendations will also suggest mechanisms through which the overall impact of the transition could be assessed. Initial findings from the eight to 10 case studies will be presented during an interim meeting with policy makers, stakeholders, and prominent academics and researchers to obtain feedback. Draft recommendations to support the transformation of selected HEIs into applied colleges, including specific recommendations for a possible project to implement reforms in several HEIs, will be discussed at a final TA workshop. Key findings and conclusions will be published in a TA case study report targeting an audience of policy makers and higher education practitioners in the PRC, as well as in other developing member countries of ADB.

14. Major risks to the successful completion of the proposed TA include the following: (i) the speed of government policy decisions overtakes project findings, (ii) local governments and HEIs are not ready to participate in the consultation process, and (iii) there are no resource transfers for local governments and HEIs to follow through with the proposed TA recommendations. To mitigate the risks, local consultants will be recruited and a network of local experts leading several HEIs will be created to (i) help develop an in-depth understanding of the sociocultural terrain, (ii) lead consultations throughout the process in close consultation with decision makers, and (iii) provide interim and final recommendations in a timely manner.

C. Cost and Financing

15. 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 government will provide counterpart support in the form of counterpart staff, policy documents and guidelines, statistical data, information, office space, and other in-kind contributions. The cost estimates and financing plan are in Appendix 2.

D. Implementation Arrangements

16. The executing agency for the project is the MOE's Department of Comprehensive Reforms. A steering group comprising relevant departments of the MOE, certain provincial representatives, and prominent academics from top-tier universities will be established to provide guidance during the TA and throughout implementation. The TA will be implemented from 15 September 2015 to 31 March 2017.

17. The TA will fund a national consultant and a consulting firm with demonstrated expertise in higher education and in-depth knowledge of the country context. The national consultant will ensure continuity of this work with the ongoing TA.⁸ The national expert, who will be familiar with the ongoing TA content and research, will provide specialized insights to the TA and consulting

⁸ ADB. 2014. *Technical Assistance to the People's Republic of China for Policies for Promoting Employment of University Graduates*. Manila.

teams at key points of assignment (e.g., inception report, interim report, and workshops) and will coordinate closely, through the MOE and ADB, with the consulting team to support clear linkages and transfer of knowledge between the two TA projects, which are closely linked. The national consultant (6 person-months) will be engaged on an individual basis. Services to support consultations, workshops, and surveys will also be carried out in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time) and Procurement Guidelines (2015, as amended from time to time). The consulting firm will undertake the assessment of HEIs and prepare the case studies, working closely with the national consultant, and will be responsible for preparing the interim and final reports. The consulting firm will be selected under a fixed-budget selection method, with an estimated budget of \$250,000. Given the experimental and pilot approaches required to identify specific issues confronting HEIs in their transformation into polytechnics, this method is most appropriate and will be used to draw on the expertise of the consulting firm to adopt the best possible approach and methodology.

18. The TA will also engage around six to eight resource persons (national and international higher education experts, totaling 2 person-months) to contribute to the TA in an advisory role, peer review progress report, and/or participate in workshops. Additionally, ADB staff could also be engaged as facilitators or resource persons.

19. The consultants will be selected based on their academic qualifications and relevant work experience. The consultants under the TA will be selected in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). The terms of reference (Appendix 3) outline their tasks. All procurement under the TA will be carried out in accordance with ADB's Procurement Guidelines. Proceeds of the TA will be disbursed in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).

20. The findings of the TA will be disseminated to stakeholders during the course of the TA and at the final workshop. Interim findings will be shared locally at workshops that will bring together leaders and key staff of the HEIs, and recommendations will be shared nationally through consultations and workshops. Resource persons have been included in the TA to provide policy advice during dissemination. The findings will directly contribute to the policy development on tertiary education reforms led by the MOE.

IV. THE PRESIDENT'S DECISION

21. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$400,000 on a grant basis to the Government of the People's Republic of China for Policy Analysis and Assessment of Reforming Education Mode for Promoting Employment of Graduates in Applied Tertiary Institutions, and hereby reports this action to the Board.

DESIGN AND MONITORING FRAMEWORK

| Impacts the Project is aligned with: | | | |
|--|--|---|---|
| <p>Employment-ready college graduates in the targeted provinces and sectors increased (National Outline for Medium and Long-term Education Reform and Development, 2010–2020^a)</p> <p>Students' attitudes regarding higher education and employment shifted (National Outline for Medium and Long-term Education Reform and Development, 2010–2020^a)</p> | | | |
| Project Results Chain | Performance Indicators with Targets and Baselines | Data Sources and Reporting | Risks |
| Outcome | | | |
| HEIs' transformation into applied colleges successfully planned | Guidelines and a road map for the transformation of selected HEIs into applied colleges adapted by the MOE by March 2017 (baseline 2014 = 0) | One-off report on the recommendations proposal issued at the end of the TA by the MOE's Department of Comprehensive Reforms titled "Transforming Higher Education Institutions into Applied Colleges" | The government delays its plans for transitioning HEIs toward applied colleges |
| Outputs | | | |
| 1. Local HEIs mapped | 1a. HEIs to be included in the case studies selected by December 2015 (baseline 2014 = not applicable) | 1a. First of two progress reports issued over the course of the TA by the MOE Department of Comprehensive Reforms titled "PRC: Reforming Education Mode for Promoting Employment of Graduates in Chinese Applied Tertiary Institutions–Technical Assistance Progress Report 1" | Stalled collaboration with provincial authorities and other stakeholders to identify relevant cases |
| 2. Selected HEIs and their capacity to implement the transition toward a polytechnic model assessed | 2a. Eight to 10 case studies delivered by December 2016 with in-depth information on the selected HEIs and the socioeconomic context in which they operate (baseline 2014 = not applicable) | 2a. Second of two progress reports issued over the course of the TA by the MOE Department of Comprehensive Reforms titled "PRC: Reforming Education Mode for Promoting Employment of Graduates in Chinese Applied Tertiary Institutions–Technical Assistance Progress Report 2" | HEIs not ready to collaborate |
| 3. Recommendations to guide the phased strategy of the MOE and provincial governments to implement the transition toward applied colleges provided | 3a. Report consisting of recommendations and guidelines provided by January 2017 for the transition of selected HEIs toward applied colleges (eight to 10 case studies) (baseline 2014 = not applicable) | 3a. One-off TA final report issued by the MOE Department of Comprehensive Reforms titled "Transforming Higher Education Institutions Into Applied Colleges" | Selected HEIs and other stakeholders reluctant to implement the reforms |

| |
|--|
| <p>Key Activities with Milestones</p> <p>1. Mapping of local HEIs</p> <p>1.1 Undertake a desk review to map local HEIs, including specialty fields and governance structures (October–November 2015)</p> <p>1.2 Undertake in-depth consultations with the MOE and provincial authorities to identify locales and specific institutions that will be included in the case studies (November–December 2015)</p> <p>2. Assessment of the selected HEIs and their capacity to transform</p> <p>2.1 Undertake the case studies through extensive consultations with HEIs and local stakeholders, including students, employers, and provincial authorities (January–December 2016)</p> <p>2.2 Identify and review good practices in developing applied colleges (January–March 2016)</p> <p>2.3 Prepare an interim report (March–May 2016)</p> <p>2.4 Organize a midterm review workshop to share preliminary findings (May 2016)</p> <p>3. Recommendations to guide the phased strategy of the MOE and provincial governments to promote applied colleges</p> <p>3.1 Prepare recommendations to support the transformation of the selected HEIs into applied colleges and identify promising pilots (September 2016–November 2016)</p> <p>3.2 Conduct a workshop to share key findings and obtain feedback (December 2016)</p> <p>3.3 Prepare the final report proposing recommendations to promote applied colleges (February 2017)</p> |
| <p>Inputs</p> <p>ADB: \$400,000</p> <p>Note: The government will provide counterpart support in the form of counterpart staff, policy documents and guidelines, statistical data, information, office space, and other in-kind contributions.</p> |
| <p>Assumptions for Partner Financing</p> <p>Not applicable.</p> |

ADB = Asian Development Bank, HEI = higher education institution, MOE = Ministry of Education, PRC = People's Republic of China, TA = technical assistance.

^a Government of the People's Republic of China, Ministry of Education. 2010. *National Outline for Medium and Long-term Education Reform and Development 2010–2020*. Beijing.

Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN

(\$'000)

| Item | Amount |
|---|---------------|
| Asian Development Bank^a | |
| 1. Consultants | |
| a. Remuneration and per diem | |
| i. International consultants | 115.0 |
| ii. National consultants | 95.0 |
| b. International and local travel | 60.0 |
| c. Reports, translation, and communications | 10.0 |
| 2. Training, seminars, and conferences | 70.0 |
| 3. Surveys | 40.0 |
| 4. Contingencies | 10.0 |
| 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, policy documents and guidelines, statistical data, information, office space, and other in-kind contributions. The value of government contribution is estimated to account for about 11% of the total TA cost.

^a Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF—other sources). TASF financing is allocated based on the country operations business plan, 2015–2017 for the People's Republic of China.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. The Asian Development Bank (ADB) will engage one national consultant on an individual basis and a team of consultants through a firm selection process to undertake the policy advisory work on promoting applied tertiary institutions in the People's Republic of China (PRC). The consulting firm will be selected under a fixed budget selection method. As an output-based approach, this method will be used to (i) draw on the expertise of the consulting firm to adopt the best possible approach to undertake this assignment, and (ii) deliver the expected outputs that address education policy reform in the area of applied higher education to strengthen linkages with the labor market. The policy and advisory technical assistance (TA) will also engage resource persons (global experts on higher education reforms) to contribute to the TA in an advisory role, peer review progress reports, and/or participate in workshops.

I. Consulting Firm

A. Scope of Services

2. The firm will report to the ADB project officer through the assigned team leader and will perform the following tasks:

- (i) Prepare a detailed mapping of the existing local higher education institution (HEI) system in the PRC,¹ including
 - (a) the admission system, taking into account gender and socioeconomic aspects;
 - (b) specialty fields and links with local economic sectors;
 - (c) university–industry collaboration;
 - (d) degrees proposed (including short courses and lifelong learning);
 - (e) the faculty profile and professional development opportunities;
 - (f) the governance structure;
 - (g) the financing system;
 - (h) employment services proposed to graduates (including entrepreneurship programs, if any) and tracer studies;
 - (i) existing collaborations and opportunities for partnerships with local industry and employers; and
 - (j) students' and graduates' networking options (e.g., alumni networks and mentoring programs).
- (ii) Conduct eight to 10 case studies of the selected HEIs to assess their capacity and constraints to transition toward applied colleges. Key findings and conclusions will be published in a TA case study report targeting an audience of policy makers and higher education practitioners in the PRC, as well as in other developing member countries of ADB.
- (iii) Organize a midterm review workshop to (a) share preliminary findings emerging from the initial stakeholder consultation phase and the institutional analyses of the selected HEIs, and (b) bring together stakeholders to strengthen HEI networks and enable horizontal knowledge and experience sharing.

¹ The mapping should provide the basis for the selection of eight to 10 HEIs that will be featured in the case studies.

- (iv) Prepare a set of comprehensive recommendations to inform the phased strategy of the Ministry of Education (MOE) and provincial governments to implement the transition toward a polytechnic model, including sector-specific suggestions whenever relevant (e.g., local industry, agriculture, medical services).
- (v) Propose adapted methods to embed impact evaluation mechanisms in the transition process.
- (vi) Organize an interim meeting to share preliminary recommendations with policy makers, stakeholders, and leading academics and researchers to obtain feedback.
- (vii) Organize and administer trainings, seminars, and conferences.
- (viii) Prepare specific recommendations for a possible project to implement reforms in several HEIs.

B. Key Expertise Required

3. The consulting firm will determine the number and nature of experts it requires to achieve the objectives of the contract, in accordance with its proposed approach and methodology. However, ADB requires a minimum of one international or national key expert to act as the team leader and coordinator.

4. The outline of the final report will be as follows:

- I. Introduction
 - A. Rationale for the study
 - B. Methodology
- II. The tertiary education landscape in the PRC
 - A. Overview of the tertiary education system
 - 1. Type of institutions
 - 2. Governance structures
 - 3. Graduates' school-to-work transition
 - B. Case studies of selected higher education institutions
 - 1. Rationale for selecting the institutions
 - 2. Specialty fields
 - 3. Governance structures
 - 4. Student profile
 - a. Student enrollments by major
 - b. Gender
 - c. Rural migrants
 - d. Ethnic minorities
 - 5. Linkages with local economy
 - a. Demand for skills
 - b. Entrepreneurship and potential to improve linkages with local economies
 - c. Applied research
 - 6. Labor market information systems (formal and informal)

- III. A road map for transitioning toward applied colleges
 - A. Good practices in developing applied colleges
 - 1. International
 - 2. Domestic (if any)
 - B. Recommendations for the selected higher education institutions
 - 1. Recommendations
 - 2. The way forward: piloting transitions in selected institutions
 - a. Pilot design
 - b. Embedding impact evaluation at the piloting stage

5. **Tertiary education expert, and team leader and coordinator** (international or national, 18 person-months). The expert and team leader will be responsible for the overall outputs of the assignment and will lead the coordination, management, and reporting functions associated with successful implementation of the project. The expert will have (i) at least a master's degree in education or a related field; (ii) at least 15 years' experience in managing education projects or research; (iii) excellent communication (written and spoken) skills; (iv) in-depth knowledge of the tertiary education sector in the PRC, including the tertiary technical and vocational education and training sector; and (v) experience with tertiary education institutional or organizational reform. The expert will lead the team of consultants to design and oversee the research (i.e., consultations, analyses, report writing) under the TA, and also ensure coordination with the MOE and the project steering committee to ensure timely and focused implementation of the TA. The expert will also take responsibility for (i) preparing the case study methodology, including the selection of relevant examples to showcase, and sharing it as an inception report; (ii) overseeing the quality of the work of the project; and (iii) supervising the timely and high-quality analysis required for preparing the case studies and the final recommendations report. The expert will also organize domestic consultative workshops and stakeholder consultations. The expert will coordinate closely with the national higher education specialist and/or economist to ensure that research findings on the extent of graduate employment among tertiary graduates are taken into account in the assessment of the HEIs.

6. In addition to the tertiary education expert, the consulting entity should also include in its technical proposal, personnel work plan, and financial proposal all other non-key experts required in accordance with its proposed approach and methodology. The consulting entity must also determine and indicate the number of person-months required for each key or non-key expert.

7. All experts engaged under the contract, whether key or non-key experts, must be citizens of ADB member countries.

C. Preparation of Proposal

8. The consulting entity should prepare a detailed description of how it proposes to deliver the outputs of the contract in a section of its proposal called "Approach and Methodology." In this section, the consulting entity should be explicit in explaining how it will achieve the outputs, and it should include information about existing activities upon which it may eventually build, as well as details of who will comprise the project team.

9. Proposing entities must also describe their experience in the PRC and their ability to operate in Mandarin.

10. Only one curriculum vitae must be submitted for each key and non-key expert included in the proposal. Only the curriculum vitae of the key expert will be scored as part of the technical evaluation of proposals. The curricula vitae of non-key experts will not be scored. However, ADB will review and individually approve or reject each curriculum vitae for every non-key expert position in the proposal.

11. All positions under the contract, both key and non-key experts, must be included and budgeted for in the financial proposal, in accordance with the person-month allocation required for each as defined by the consulting firm.

D. Terms of the Assignment

12. The duration of the assignment is 18 months from the start date, expected to be around the last week of September 2015. The terms will be revised based on consultations between the parties involved in the assignment according to changes and/or additional requirements identified during the course of implementation.

II. Individual Consultants

13. **Higher education specialist and/or economist** (national, 6 person-months, intermittent). The expert will have (i) at least a master's degree in education, economics, or social or public policy; (ii) at least 10 years' experience in education with a specialization in higher education or education economics; (iii) significant experience working in the PRC; and (iv) proven written (and published) work. The expert will advise on the overall design of the case study methodology and provide specific guidance to the TA and project team and the steering committee on issues relating to tertiary institution reform, particularly the transformation into applied colleges. The higher education expert will coordinate closely, through the MOE and ADB project team, with the consulting team. The expert will provide inputs on the inception report, review progress reports, and participate in workshops. Ideally, the expert should be a team member of the ongoing Policies for Promoting Employment of University Graduates TA project to maximize coordination.²

14. **Resource persons** (national and international, total of 2 person-months, with each resource person working up to a maximum of 10 days). The six to eight resource persons will help provide specialized reviews of interim reports and will participate in the workshops. These resource persons will have (i) at least a master's degree in education, economics, or social or public policy; and (ii) demonstrated expertise in higher education and/or technical and vocational education and training.

² ADB. 2014. *Technical Assistance to the People's Republic of China for Policies for Promoting Employment of University Graduates*. Manila.