



Technical Assistance Report

Project Number: 50395-007
Transaction Technical Assistance (TRTA)
December 2018

Republic of Indonesia: Supporting the Advanced Knowledge and Skills for Sustainable Growth Project

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 26 October 2018)

Currency unit	–	rupiah (Rp)
Rp1.00	=	\$ 0.00006587
\$1.00	=	Rp15,180

ABBREVIATIONS

ADB	–	Asian Development Bank
MORTHE	–	Ministry of Research, Technology and Higher Education
RPJMN	–	Rencana Pembangunan Jangka Menengah Nasional (National Medium-Term Development Plan)
TA	–	technical assistance
TVET	–	technical and vocational education and training

NOTE

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

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TRANSACTION TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 50395-007	
Project Name	Supporting the Advanced Knowledge and Skills for Sustainable Growth Project	Department/Division	SERD/SEHS
Nature of Activity	Capacity Development	Executing Agency	Ministry of Research, Technology and Higher Education
Modality	Regular		
Country	Indonesia		
2. Sector	Subsector(s)	ADB Financing (\$ million)	
		Total	0.00
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	Medium
Regional integration (RCI)	Pillar 2: Trade and investment		
4. Drivers of Change		Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Organizational development	Gender equity (GEN)	✓
Knowledge solutions (KNS)	Application and use of new knowledge solutions in key operational areas		
Partnerships (PAR)	Civil society organizations Implementation Regional organizations		
5. Poverty and SDG Targeting		Location Impact	
Geographic Targeting	No	Not Applicable	
Household Targeting	No		
SDG Targeting	Yes		
SDG Goals	SDG4, SDG13		
6. Risk Categorization	Low		
7. Safeguard Categorization	Safeguard Policy Statement does not apply		
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		0.00	
None		0.00	
Cofinancing		1.15	
Japan Fund for Poverty Reduction (Full ADB Administration)		1.15	
Counterpart		0.00	
None		0.00	
Total		1.15	
Currency of ADB Financing: USD			

I. THE ONGOING PROJECT

1. The Advanced Knowledge and Skills for Sustainable Growth Project will improve Indonesia's higher-education system to support sustainable economic growth.¹ The project will upgrade four public universities—the University of Malikussaleh, the University of Jambi, and the University of Riau in Sumatra; and the Indonesia University of Education in Bandung, West Java—to provide high-quality and demand-based programs. The project aligns with the National Medium-term Development Plan (RPJMN), 2015–2019, and the Asian Development Bank (ADB) country partnership strategy for Indonesia, 2016–2019, which highlights the critical role of vocational and tertiary education in providing the skilled human capital needed to support Indonesia's economic growth.² The impact of the project is increased income and productivity of the working age population. The outcome will be strengthened access, relevance, and quality of targeted universities. The project has two outputs (i) market-responsive programs delivered; and (ii) training of technical-and-vocational-education-and-training (TVET) teachers improved. The total cost for the project is \$266.52 million, with \$200 million financed by a loan from ADB. Implementation of the project starts in 2019. The proposed transaction technical assistance (TA) for \$1.15 million, to be financed by the Japan Fund for Poverty Reduction, will support implementation of the project.³ The project and the TA align with ADB's Strategy 2030, which calls for improving education.⁴

II. THE TECHNICAL ASSISTANCE

A. Justification

2. The loan project will support the construction and upgrading of new facilities that incorporate green-building and climate-proofing design features. It will also strengthen staff capacity at the universities and support demand-driven quality education and research aligned with local economic priorities. To achieve these goals, the following areas need to be strengthened: (i) linking universities with industry in research and education, (ii) measuring and monitoring quality and relevance of education and research, and (iii) collaboration with international partners and stakeholders. The transaction TA will support implementation of these innovative elements in the initial stage of the loan project. This will include the introduction of national and international best practices in research and education and the development of a medium-term higher-education investment plan and a medium-term strategy to educate TVET teachers. The TA will also support the assessment of pilots in entrepreneurship and technology that will benefit higher education. The proposed scope and scale of these activities, including intensive collaboration between ministries and other stakeholders and access to international

¹ ADB. 2018. *Republic of Indonesia: Advanced Knowledge and Skills for Sustainable Growth Project*. Manila.

² ADB. 2016. *Country Partnership Strategy: Indonesia, 2016–2019*. Manila; Government of Indonesia, National Development Planning Agency (BAPPENAS). 2015. *National Medium-Term Development Plan (RPJMN), 2015–2019*. Jakarta. ADB also supports the Polytechnic Education Development Project in higher education. ADB. 2012. *Republic of Indonesia: Polytechnic Education Development Project*. Manila. ADB has highlighted the importance of higher education for equitable economic growth and for responding to emerging technologies through its technical assistance and reports. ADB. 2010. *Republic of Indonesia: Education Sector Analytical and Capacity Development Partnership*. Manila. ADB. 2017. *Asian Development Outlook 2017*. Manila; ADB. 2018. *Asian Development Outlook 2018*. Manila; ADB. 2018. *Republic of Indonesia: Enhancing Productivity through Quality Jobs*. Manila.

³ ADB. 2017. *Country Operations and Business Plan: Indonesia, 2018–2020*. Manila. The TA was included for \$1.0 million.

⁴ ADB. 2018. *Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific*. Manila.

networks and experts, requires a transaction TA to ensure the successful implementation of the loan project.⁵

B. Outputs and Activities

3. **Output 1: Initial phase of loan project implementation supported.** The TA will (i) introduce improved measures of quality and relevance in the project, (ii) introduce international best practices in gender analysis, (iii) apply innovative building designs, (iv) develop centers of excellence, (v) strengthen governance, (vi) develop a medium-term investment plan in higher education and a medium-term strategy to educate TVET teachers, and (vii) initiate knowledge management.

4. **Measures of quality and relevance.** The TA will set the baseline for all four universities for measuring quality of education using the new accreditation instrument developed by the national accreditation body in early 2019. The TA will also introduce the improved tracer study methodology to measure relevance and ensure coordination with stakeholders. The TA will assist in improving monitoring of quality and relevance of education and research, and in strengthening the universities in using monitoring results to improve education and research programs.

5. **Gender analysis.** The TA will provide targeted international gender and labor-market expertise to help the universities analyze the transition of men and women from university to the labor market in selected disciplines.

6. **Design and engineering.** The loan project aims to implement innovative building design principles with a focus on gender-responsive, gender-inclusive, and sustainable designs. The TA will build the capacity of the project management unit in the Ministry of Research, Technology and Higher Education (MORTHE) and the project implementation units in the universities to apply these principles.

7. **Centers of excellence.** To support the development of centers of excellence under each university, the TA will provide international short-term expertise to introduce international best practices on an as-needed basis.

8. **Governance capacity.** To instill international best practices and strengthen governance of universities, the TA will collaborate with the Human Capital and Education for Asian Development Foundation, a renowned international think tank with rich experience in higher education in Asia and a knowledge partner of ADB.

9. **Strategy formulation: Medium-term investment plan for higher education.** To implement the RPJMN, 2020–2024, which is currently under preparation, the TA will provide expertise to the MORTHE and other stakeholders to support and facilitate collaborative strategy development for investment in higher education.

10. **Strategy formulation: Medium-term strategy to educate technical-and-vocational-education-and-training teachers.** The center of excellence in the Indonesia University of Education will focus on TVET-teacher education. In line with the RPJMN, 2020–2024, the TA will support development of a medium-term strategy to educate TVET teachers both for in-service and pre-service training. The development of this strategy will be undertaken in close collaboration with the MORTHE, the Ministry of Education and Culture, and other stakeholders.

⁵ The TA first appeared in the business opportunities section of ADB's website on 2 October 2017.

11. **Knowledge management.** The TA will support the MORTHE and the universities to establish knowledge management for the loan project, including a project website, outreach, and publications. This includes a solid communications plan for the centers of excellence.

12. **Output 2: Entrepreneurship and technology pilot assessments in higher education prepared.** The TA will assess innovative approaches in entrepreneurship and technology implemented in Indonesia. The results of these assessments will inform the development of new education programs and initiate policy dialogue.⁶ The following three assessments are proposed:

- (i) **Evaluation of innovative entrepreneurship programs and programs to link university–industry linkage programs.** Indonesia aims to strengthen its capacity for entrepreneurship. The TA will support an evaluation of four or five entrepreneurship programs and/or programs to link universities with industry. This will include programs run by (a) the Japan International Corporation Agency; (b) the Asian Entrepreneurship Training Program, supported by the Zurich University of Applied Sciences and the Swiss Federal Institute of Technology; and (c) private initiatives.⁷ The TA will support independent evaluations of these programs to develop lessons learned for higher-education institutions and future entrepreneurship programs.
- (ii) **Skills for a new technology sector.** The TA will support a holistic analysis of labor demand and supply trends in a selected industry to fully understand its challenges. The electricity sector is proposed, as it is an important sector in Indonesia that is undergoing rapid change because of new technological developments. It is also a sector in which ADB provides significant support. Future needs will be influenced by expansion, a shift to sustainable energy, and the introduction of smart systems. The approach will build upon lessons learned from an earlier study conducted on demand and supply in the maritime sector by the Education Sector Analytical and Capacity Development Partnership.⁸ A local nongovernment organization with a strong grassroots network will be engaged to conduct the analysis.
- (iii) **Improving employability.** The TA will support analytical work to identify how the employability of graduates can improve. The TA will build upon the experiences and results of the pilots, which are planned for 2019. In these pilots, a program to support the transition from school to work for graduates and a program to support upskilling of workers will be tested.⁹ Based upon the lessons learned from these pilots, the proposed TA will

⁶ These pilot assessments will not have any impact on the environment.

⁷ The Japan International Corporation Agency programs were or are implemented in Gadjah Mada University, Hasanuddin University, and the Electronic Engineering Polytechnic Institute of Surabaya. The Asian Entrepreneurship Training Program aims to provide targeted coaching during a few intensive working sessions in which joint Swiss and Indonesian teams work on their proposals. The program is a pilot within the Swiss bilateral Science and Technology Cooperation with Asia (funded by the Swiss State Secretariat for Education, Research and Innovation) and is planned for implementation in 2019. A possible national private program would be Lingkaran's Business Starter Pack program, a 3-month short course for budding entrepreneurs in Jakarta. Lingkaran is an educational community which offers entrepreneurship training programs in the creative industry.

⁸ ADB. 2010. *Republic of Indonesia: Education Sector Analytical and Capacity Development Partnership*. Manila.

⁹ These pilots are supported by ongoing ADB TA support. The proposed TA will build upon the results of this TA. ADB. 2016. *Technical Assistance to provide Support to the Association of Southeast Asian Nations Economic Community*. Manila.

support new initiatives, like the Skills Development Fund, which is currently under discussion.¹⁰

C. Cost and Financing

13. The TA is estimated to cost \$1,250,000 equivalent, of which \$1,150,000 equivalent will be financed on a grant basis by the Japan Fund for Poverty Reduction and administered by ADB. The key expenditure items are listed in Appendix 1. The government will provide counterpart support in the form of counterpart staff, logistical support, and other in-kind contributions.

14. Ineligible expenditures under the Japan Fund for Poverty Reduction include (i) vehicle purchases, (ii) civil servant salaries, (iii) foreign travel, (iv) scholarships or long internships, (v) detailed engineering design, (vi) civil works and other related expenses, and (vii) those under ADB's List of Ineligible Items (or Negative List) and Prohibited Investment Activities List.¹¹

D. Implementation Arrangements

15. ADB will administer the TA. The Directorate-General of Resources for Science, Technology and Higher Education of the MORTHE will be the executing agency for the TA. A project steering committee will be established for the project, which will monitor implementation of the TA.

16. The implementation arrangements are summarized in the table below.

Implementation Arrangements

Aspects	Arrangements		
Indicative implementation period	January 2019–December 2020		
Executing agency	Directorate-General of Resources for Science, Technology and Higher Education of the Ministry of Research, Technology and Higher Education		
Implementing agencies	ADB Southeast Asia Department, Human and Social Development Division		
Consultants	To be selected and engaged by ADB		
	Individual: Individual Consultant Selection	5 person-months (international and national expertise)	\$89,500
	Firm Quality- and Cost-Based Selection	Supporting loan project implementation and medium-term planning: 31 person-months (international and national expertise)	\$813,500
	Firm: Quality- and Cost-Based Selection	Evaluation of entrepreneurship development programs: 5 person-months (international and national expertise)	\$74,000
	Firm: Single Source Selection	Study on skills for the electricity sector (output-based contract)	\$100,000
Disbursement	The TA resources will be disbursed following ADB's <i>Technical Assistance Disbursement Handbook</i> (2010, as amended from time to time).		

ADB = Asian Development Bank, TA = technical assistance.

Source: Asian Development Bank.

¹⁰ The Government of Indonesia is considering establishing a Skills Development Fund. This fund would allow TVET system to respond more flexibly to changing skills needs.

¹¹ ADB. 2011. *Cost Sharing and Expenditure Eligibility: Policy Implementation Review*. Manila

17. **Consulting services.** ADB will recruit three firms and individual consultants. Firms will be selected to ensure maximum quality for specialized services as the nature and planning of the services vary significantly. The first consulting firm will be a specialist with international expertise in higher education and will be recruited using a simplified technical proposal for the quality- and cost-based selection (QCBS) method (quality–cost ratio of 90:10). This firm will support the MORTHE to accomplish the following (i) develop a medium-term higher-education investment plan and a medium-term strategy to educate TVET teachers; (ii) introduce a new accreditation tool to measure quality and a new tracer study tool to measure relevance; (iii) strengthen the centers of excellence; (iv) develop a training program with the Human Capital and Education for Asian Development Foundation; and (v) strengthen knowledge management in coordination with the universities and the MORTHE. The second firm will be a specialist in designing and evaluating entrepreneurship development programs and will be recruited using a biodata technical proposal for QCBS method (quality–cost of 90:10). The firm will evaluate the entrepreneurship development programs. Coaction Indonesia (a non-profit think tank) will be recruited using the single source selection method to conduct the study on skills for the electricity sector, as Coaction has unique expertise in the sector and the contract size is small. An international gender specialist (2 person-months) and a national engineering specialist (3 person-months) will be recruited on an individual basis. ADB will engage consulting firms and individual consultants in accordance with ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions.¹² To the extent possible, output-based contracts will be utilized to achieve administrative efficiency. Any training to be provided under the TA will be managed by consultants or directly procured by ADB in line with the ADB Procurement Policy and relevant staff Instructions.

III. THE PRESIDENT'S DECISION

18. The President, acting under the authority delegated by the Board, has approved ADB administering technical assistance not exceeding the equivalent of \$1,150,000 to the Government of Indonesia to be financed on a grant basis by the Japan Fund for Poverty Reduction for Supporting the Advanced Knowledge and Skills for Sustainable Growth Project, and hereby reports this action to the Board.

¹² Terms of Reference for Consultants (accessible from the list of linked documents in Appendix 2).

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Amount
A. Japan Fund for Poverty Reduction Fund^a	
1. Consultant	
a. Remuneration and per diem	
i. International consultants	245.4
ii. National consultants	364.0
b. Out-of-pocket expenditures	
i. International and local travel	51.5
ii. Reports and communications	7.0
2. Training, seminars, and conferences ^b	
a. Resource persons and workshops	364.0
3. Studies, surveys, and publications	10.0
4. Miscellaneous administration and support costs	35.0
5. Contingencies	73.1
Total	1,150.0

Note: The technical assistance (TA) is estimated to cost \$1,250,000, of which the contribution from the Japan Fund for Poverty Reduction are presented in the table above. The government will provide counterpart support in the form of counterpart staff, logistical support, and other in-kind contributions. The value of government contribution is estimated to account for 8% of the total TA cost.

^a Administered by Asian Development Bank.

^b Workshops, training, seminars, and conferences.

Source: Asian Development Bank estimates.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/LinkedDocs/?id=50395-007-TARreport>

1. Terms of Reference for Consultants
2. Approved Report and Recommendation of the President