



# Technical Assistance Report

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Project Number: 53286-001  
Knowledge and Support Technical Assistance (KSTA)  
December 2019

## Strengthening Knowledge Alliance for Innovation, Technology, and Regional Cooperation

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Asian Development Bank



## ABBREVIATIONS

ADB	–	Asian Development Bank
DMC	–	developing member country
ERCD	–	Economic Research and Regional Cooperation Department
ERCI	–	Regional Cooperation and Integration Division
TA	–	technical assistance

## NOTE

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

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## KNOWLEDGE AND SUPPORT TECHNICAL ASSISTANCE AT A GLANCE

<b>1. Basic Data</b>		<b>Project Number:</b> 53286-001	
<b>Project Name</b>	Strengthening Knowledge Alliance for Innovation, Technology, and Regional Cooperation	<b>Department/Division</b>	ERCD/ERCI
<b>Nature of Activity Modality</b>	Research and Development Regular	<b>Executing Agency</b>	Asian Development Bank
<b>Country</b>	REG (All DMCs)		
<b>2. Sector</b>		<b>ADB Financing (\$ million)</b>	
✓ Industry and trade	Trade and services		0.50
Finance	Finance sector development		0.25
		<b>Total</b>	<b>0.75</b>
<b>3. Operational Priorities</b>		<b>Climate Change Information</b>	
✓ Fostering regional cooperation and integration		Climate Change impact on the Project	Low
<b>Sustainable Development Goals</b>		<b>Gender Equity and Mainstreaming</b>	
SDG 8.9		No gender elements (NGE)	✓
SDG 9.1			
SDG 17.10		<b>Poverty Targeting</b>	
		General Intervention on Poverty	✓
<b>4. Risk Categorization</b> Low			
<b>5. Safeguard Categorization</b> Safeguard Policy Statement does not apply			
<b>6. Financing</b>			
<b>Modality and Sources</b>		<b>Amount (\$ million)</b>	
<b>ADB</b>		<b>0.75</b>	
Knowledge and Support technical assistance: Technical Assistance Special Fund		0.75	
<b>Cofinancing</b>		<b>0.00</b>	
None		0.00	
<b>Counterpart</b>		<b>0.00</b>	
None		0.00	
<b>Total</b>		<b>0.75</b>	
<b>Currency of ADB Financing:</b> US Dollar			



## I. INTRODUCTION

1. The knowledge and support technical assistance (TA) will strengthen development research partnerships on the themes of innovation, technology, and regional cooperation by collaborating with policy research institutions in Asia and the Pacific. It will promote new knowledge generated from these research works by organizing technical workshops, policy dialogues, and networking among government and research institutions.

2. The TA is included in the 2019 annual work program for the Economic Research and Regional Cooperation Department (ERCD) of the Asian Development Bank (ADB) to (i) undertake and disseminate policy research and knowledge generation on development and regional economic cooperation; and (ii) collaborate and network with international organizations, government agencies, and research institutes.<sup>1</sup> It will also support ADB's Strategy 2030 Operational Plan for Priority 7: Fostering Regional Cooperation and Integration, 2019–2024 by contributing to the improvement of policy formulation and project design on regional public goods.<sup>2</sup>

## II. ISSUES

3. Innovation and technological change are rapidly transforming the economic landscape across Asia and the Pacific. Advancement of digital computing technologies and innovations such as mobile communications, artificial intelligence, big data analysis, and robotics are changing the way entities produce, transact, and interact in the markets. Business processes have also benefitted from a productivity boost through the emergence of the platform economy – digital structures that enable economic and social activities – and e-commerce.<sup>3</sup> Technologies have allowed many economic activities to transcend borders at much lower costs.

4. Along with digitalization, increasing economic transactions, and interaction of people comes increased complexity in economic activities, cross-border interdependence, and externalities.<sup>4</sup> The share of cross-border services and financial transactions using digital platforms has expanded, possibly adding complexity to the policy and regulatory environment. While new technologies such as digital identity, artificial intelligence, and block chain technologies have the potential to promote efficiency and transparency in such economic activities and markets, the digital economy that transcends borders is generating new risks and vulnerabilities, which may simultaneously affect multiple countries. These risks can be in the forms of cyberattacks and transnational crimes resulting from the increased digital transactions, the lack of protection for the rights of the digital or online workforce, or financial contagion from increased cross-border financial transactions. The persistence of a wide digital divide within and across countries continues to pose a threat to inclusive growth.

5. Generating policy-relevant knowledge on the implications of innovation and technological change on regional cooperation is essential, especially in the following areas: (i) developing the conceptual framework to understand and model the economic impact of ongoing innovation and technological changes in Asia and the Pacific; (ii) assessing the economic potential and policy

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<sup>1</sup> The TA first appeared in the business opportunities section of ADB's website on 23 December 2019.

<sup>2</sup> ADB. 2019. *Strategy 2030 Operational Plan for Priority 7: Fostering Regional Cooperation and Integration (2019–2024)*. Manila.

<sup>3</sup> ADB. 2018. News Release. *ADB Supports Digital Technologies for Innovative Development Solutions*. Manila. <https://www.adb.org/news/adb-supports-digital-technologies-innovative-development-solutions>

<sup>4</sup> ADB. 2018. *Asian Economic Integration Report 2018*. Towards Optimal Provision of Regional Public Goods in Asia and the Pacific. Manila (pp. 122–177).

challenges for adopting a particular technology or group of technologies; and (iii) identifying the policy implications and recommendations, both at national and regional levels.

6. There is limited research that evaluates the impacts and implications of innovation and technology on the regional economy because of several reasons. Technology-related research necessitates technical expertise and exploration of new data sources and research methodologies, and these are often limited in developing member country (DMC) research institutions. Regional and cross-country research also requires resources, networks, coordination, and trust, while the supply can be limited because of externalities and the public-good nature of the knowledge.

7. This TA will respond to the need for building knowledge and strengthening knowledge sharing on the impacts and implications of innovation and technology on regional economies and policy implications for regional cooperation. It will build on ERCD's growing portfolio of broad and specific technology-focused research on the regional economic agenda, such as e-commerce, financial technology and sustainable finance, digital trade, technology and human capital development, and the movement of people.<sup>5</sup> The TA promotes innovative research that uses novel techniques and data sources, such as big data that can elucidate the effects, challenges, and opportunities of existing and emerging technologies. Cross-sectional issues on economic, social, and environmental aspects of technological innovation could also be part of the research areas.

8. This TA will encourage participation and collaboration among regional research institutions, including members of the ADB–Asian Think Tank Network, to tap advanced knowledge and expertise by forging strong international alliances. The TA team will conduct research focusing on technology in the regional context, which also contributes to improving the research capacity of the think tanks in ADB's DMCs. A past ADB project has demonstrated that providing a platform for knowledge generation and sharing can inspire and challenge younger think tanks to improve their research and institutional capacities.<sup>6</sup> An ongoing TA implemented by ERCD engaged with these think tanks, resulting in research work in the areas of aging and labor mobility and trade and global value chains, with impact on policy-making in some of the DMCs.<sup>7</sup>

### III. THE TECHNICAL ASSISTANCE

#### A. Impacts and Outcome

9. The TA is aligned with the following impacts: policy formulation and project design in ADB's DMCs enhanced, and inclusiveness of regional cooperation and integration projects strengthened.<sup>8</sup> The TA will have the following outcome: knowledge on innovation, technology, and regional cooperation improved and knowledge alliance enhanced.<sup>9</sup>

<sup>5</sup> ADB. 2018. *Embracing the E-commerce Revolution in Asia and the Pacific*. Manila; ADB. 2018. *Harnessing Technology for More Inclusive Sustainable Finance in Asia and the Pacific*. Manila; ADB. 2019. *Asia Pacific Trade Facilitation Report*. Manila; and ADB. 2018. *Tapping Technology to Maximize the Longevity Dividend in Asia*. Manila.

<sup>6</sup> ADB. 2019. *Completion Report: Provision of Knowledge Products and Services to Developing Member Countries through Systematic Knowledge Sharing*. Manila.

<sup>7</sup> ADB. 2018. *Technical Assistance for Strengthening Regional Cooperation and Integration Knowledge Partnerships and Research Network in Asia and the Pacific*. Manila. <https://www.adb.org/projects/51291-001/main>.

<sup>8</sup> ADB. 2019. *Strategy 2030 Operational Plan for Priority 7: Fostering Regional Cooperation and Integration (2019–2024)*. Manila.

<sup>9</sup> The design and monitoring framework is in Appendix 1.

## B. Outputs, Methods, and Activities

### 10. **Output 1: Study proposals from developing member country development researchers submitted and collaborative research on three development topics conducted.**

The TA will implement three joint research projects on the topics of innovation, technology, and regional cooperation, in collaboration with development research institutions. One inception workshop and two technical workshops will be conducted per theme to assess research progress. Draft research papers will be presented to a group of experts. Call for papers will be issued prior to the policy dialogue workshop in partnership with regional research institutions. Presentations in other regional forums, such as the Asia–Pacific Economic Cooperation, the Association of Southeast Asian Nations, and all of ADB’s flagship regional cooperation and integration programs, will be sought to expand the reach of the research findings.

11. **Output 2: Development researchers from developing member country think tanks improved research capacities and deepened knowledge on the themes.** Workshops and forums will be conducted for each topic to provide a platform for knowledge exchange, in-depth discussions, and discourse on innovative findings and/or ideas and policy solutions. Participants will be encouraged to discuss ongoing or proposed research works relevant to the themes. They are expected to benefit from the comments of like-minded experts.

12. **Output 3: Policy papers and reports published and disseminated.** Policy briefs, including policy recommendations, will be generated from the research papers, and will be disseminated electronically to as wide a regional audience as possible and through collaboration with other ADB projects. The results of the studies will also be shared and discussed with ADB’s regional departments.

## C. Cost and Financing

13. The TA is estimated to cost \$750,000, which will be financed on a grant basis by ADB’s Technical Assistance Special Fund. The key expenditure items are listed in Appendix 2.

## D. Implementation Arrangements

14. ADB will administer the TA. The Regional Cooperation and Integration Division (ERCI) of ERCD will be responsible for supervising and managing consultants, procuring goods, organizing workshops, providing staff as appropriate to act as resource persons in workshops, and achieving the desired outputs. Collaboration with ADB’s regional departments will be sought as much as possible for alignment of research priorities and dissemination of studies.

15. The implementation arrangements are summarized in the table.

**Implementation Arrangements**

<b>Aspects</b>	<b>Arrangements</b>		
Indicative implementation period	December 2019–November 2021		
Executing agency	Asian Development Bank (ADB), Regional Cooperation and Integration Division		
Consultants <sup>a</sup>	To be selected and engaged by ADB		
	Individual: individual selection	International expertise (14 person-months)	\$181,000
	Individual: individual selection	National expertise (77 person-months)	\$192,000

Aspects	Arrangements		
Procurement <sup>b</sup>	To be procured by ADB		
	Request for quotations	4 contracts	\$6,000
Disbursement	The technical assistance resources will be disbursed following ADB's <i>Technical Assistance Disbursement Handbook</i> (2010, as amended from time to time).		

<sup>a</sup> ADB will consider lump-sum payments, output-based contracts, and framework contracts for individual consulting services.

<sup>b</sup> Procurement Plan (accessible from the list of linked documents in Appendix 3).

Source: Asian Development Bank.

16. **Consulting services.** ADB will engage the consultants following the ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions.<sup>10</sup> ADB will commission the international consultants to conduct research on chosen topics. ERCI will work with the international consultants to produce research papers. National consultants will include project analysts, publications and/or website developers, and an event organizer. ADB will engage international experts, which may include ADB staff, as resource persons to present or facilitate discussion at seminars and other events. Engaging individual consultants is deemed more beneficial to ADB since the desired sector and/or country expertise and qualifications of individual consultants are varied. It will be difficult to find a firm that specializes in the range of topics and countries that the TA will cover.

17. An ERCI staff team comprising two international staff members (one acting as the project leader and the other as alternate project leader), one national officer, one operations coordinator, and one operations assistant will oversee and manage TA implementation.

18. **Knowledge partnerships.** Although not envisioned for this TA, should it become necessary to enter into knowledge partnership agreements of an intellectual and/or advisory nature with international organizations, academic institutions, and/or think tanks, any such partnership will follow the Staff Instruction on Business Processes for Knowledge Partnerships under Technical Assistance Operations.<sup>11</sup> The partnership agreements will clearly delineate roles and disbursements.

19. **ADB's procurement.** The purchase of software and/or statistical databases will follow the ADB Procurement Policy and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). Where applicable, the TA team will coordinate with ADB's Procurement, Portfolio and Financial Management Department and Office of the General Counsel before purchasing datasets and signing data use agreements with DMC statistical agencies and third-party database providers. Disbursements under this TA will be made in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).

20. **Social media and websites.** The TA team will maintain the website of an existing relevant project (footnote 7).<sup>12</sup> Before project closing, it will explore other sources of financing for website maintenance if there is strong demand for the website's continued existence. In the absence of such demand, the website will be automatically deactivated 3 months after the TA completion date.

<sup>10</sup> Terms of Reference for Consultants (accessible from the list of linked documents in Appendix 3).

<sup>11</sup> ADB. 2017. *Staff Instruction on Business Processes for Knowledge Partnerships under Technical Assistance Operations*. Manila.

<sup>12</sup> The project team will collaborate with ADB's Office of Information Systems and Technology to ensure that proper ADB information technology security controls are implemented.

#### **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 \$750,000 on a grant basis for Strengthening Knowledge Alliance for Innovation, Technology, and Regional Cooperation, and hereby reports this action to the Board.

## DESIGN AND MONITORING FRAMEWORK

<b>Impacts the TA is Aligned with</b>			
Policy formulation and project design in ADB's DMCs enhanced (Strategy 2030 Operational Plan for Priority 7: Fostering regional cooperation and integration, 2019–2024) <sup>a</sup>			
<b>Results Chain</b>	<b>Performance Indicators with Targets and Baselines</b>	<b>Data Sources and Reporting Mechanisms</b>	<b>Risks</b>
<b>Outcome</b> Knowledge on innovation, technology, and regional cooperation improved and knowledge alliance enhanced	By 2022: a. Partnered with at least three development research institutions (2018 baseline: two)  b. Paper accepted for presentation in at least one international peer-reviewed academic conference or undergoing selection process for publication in a peer-reviewed journal (2017 baseline: 0)  c. Downloads of published papers reached 1,000 after 2 years (2017 baseline: 758 downloads in 2 years)  d. At least 10 citations in ADB and other publications (2017 baseline: 0)	a. TA progress report, letter of acceptance to participate in research  b. Website of journals and conferences  c. Web counters of ADB  d. Google scholar, publication references	Papers take longer to complete than expected.
<b>Outputs</b> 1. Study proposals from DMC development researchers submitted and collaborative research on three development topics conducted	1a. One research collaboration established per topic (2018 baseline: One per topic)  1b. Increase in the number of study proposals accepted for presentation during the workshops (2018 baseline: At least five study proposals accepted for presentation during each of the workshops)	1a. TA progress report, BTOR  1b. TA progress report, BTORs, ATTN website	Representatives from DMCs are not at the appropriate levels because of conflict in schedules.
2. Development researchers from DMCs' think tanks improved research capacities and deepened knowledge on the themes	2. Participants and/or presenters acknowledged the usefulness of the forum in their work (2018 baseline: At least 10 participants and/or presenters indicate improvement in their knowledge or work as a result of the workshops and/or forums)	2. Workshop evaluation, BTORs, references to the TA workshops and/or forums in papers and/or reports	Presenters do not finish work on study proposals because of movement or other personal decisions.

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
3. Policy papers and reports published and disseminated	3. At least two policy papers and one book and/or report volume published electronically and disseminated through outreach events (2018 baseline: one report published)	3. Publication, TA progress report, ATTN website	
<p><b>Key Activities with Milestones</b></p> <p><b>1. Study proposals from developing member country development researchers submitted and collaborative research on three development topics conducted</b></p> <p>1.1 Hold inception workshops (Themes: February 2020 [first], October 2020 [second], February 2021 [third]).</p> <p>1.2 Carry out collaborative research with knowledge institutions or experts (Themes: April 2020 [first], December 2020 [second], April 2021 [third]).</p> <p>1.3 Submit draft research (Themes: August 2020 [first], May 2021 [second], July 2021 [third]).</p> <p>1.4 Finalize research output (Themes: October 2020 [first], July 2021 [second], October 2021 [third]).</p> <p><b>2. Development researchers from developing member country think tanks improved research capacities and deepened knowledge on the themes</b></p> <p>2.1 Hold technical workshops to discuss research progress (August 2020, April 2021, August 2021).</p> <p>2.2 Hold policy dialogues (October 2020, July 2021, October 2021).</p> <p>2.3 Hold dissemination workshops (January 2021, September 2021, December 2021).</p> <p><b>3. Policy papers and reports printed and disseminated</b></p> <p>3.1 Publish policy papers (January 2021, September 2021, December 2021).</p> <p>3.2 Publish book and/or report volume (November 2021).</p> <p>3.3 Maintain and update website (January 2020 onward).</p> <p><b>TA Management Activities</b></p> <p>Hire consultants (January–February 2020, October–November 2020, January–February 2021, or as needed).</p> <p>Procure information and knowledge services (as needed).</p>			
<p><b>Inputs</b></p> <p>ADB: \$750,000 Technical Assistance Special Fund (TASF-6)</p>			
<p><b>Assumptions for Partner Financing</b></p> <p>Not applicable</p>			

ADB = Asian Development Bank, ATTN = ADB–Asian Think Tanks Network, BTOR = back-to-office report, DMC = developing member country, TA = technical assistance.

<sup>a</sup> ADB. 2019. *Strategy 2030 Operational Plan for Priority 7: Fostering Regional Cooperation and Integration (2019–2024)*. Manila.

Source: Asian Development Bank.

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

Item	Amount
<b>Asian Development Bank<sup>a</sup></b>	
1. Consultants <sup>b</sup>	
a. Remuneration and per diem	
i. International consultants	181.0
ii. National consultants	192.0
b. Out-of-pocket expenditures	
i. International and local travel	16.0
ii. Miscellaneous administration and support costs <sup>c</sup>	4.0
2. Printed external publications <sup>d</sup>	8.0
3. Goods <sup>e</sup>	6.0
4. Training, seminars, workshops, forum, and conferences	
a. Facilitators and/or resource persons	17.0
b. Travel cost of ADB staff acting as a resource person and/or administrative support <sup>f</sup>	16.0
c. Venue rental and related facilities	40.0
d. Participants <sup>g</sup>	194.0
e. Representation <sup>f</sup>	5.0
5. Miscellaneous administration and support costs <sup>h</sup>	31.0
6. Contingencies	40.0
<b>Total</b>	<b>750.0</b>

ADB = Asian Development Bank.

<sup>a</sup> Financed by the Technical Assistance Special Fund of ADB: \$750,000 (TASF-6).

<sup>b</sup> Lump-sum payments, output-based contracts, and framework contracts will be considered for engaging consulting services.

<sup>c</sup> Includes costs of administrative and research assistance to be incurred by individual consultants.

<sup>d</sup> Digital and print publication costs of papers and/or reports, including printing costs and payment to service providers (typesetters, translators, proofreaders, page proof checkers, and overtime pay for printing unit contractual personnel, if needed). Publications will be printed for a specific group of requestors on demand only.

<sup>e</sup> Includes office supplies and software and databases. Purchases of software will be undertaken in accordance with the ADB Procurement Policy (2017, as amended from time to time) and the associated project administration instructions or technical assistance staff instructions, and in coordination with ADB's Office of Information Systems and Technology and Office of Administrative Services, where applicable.

<sup>f</sup> ADB (Budget, Personnel, and Management Systems Department; and Strategy and Policy Department). 2013. Use of Bank Resources: Regional Technical Assistance and Technical Assistance vs. Internal Administrative Expenses Budget. Memorandum. 26 June (internal).

<sup>g</sup> Pertains to international participants in the seminars, workshops, and training that will be organized under the technical assistance and includes per diem or allowances, airfares, and miscellaneous travel expenses. Local participants from academe, government, and research institutions will also be invited to the seminars and workshops.

<sup>h</sup> Includes mailing expenses and website and hosting subscriptions.

Source: ADB estimates.

**LIST OF LINKED DOCUMENTS**

<http://www.adb.org/Documents/LinkedDocs/?id=53286-001-TARreport>

1. Terms of Reference for Consultants
2. Procurement Plan