



Technical Assistance Report

Project Number: 55215-001
Transaction Technical Assistance Facility (F-TRTA)
September 2021

Supporting Enhanced COVID-19 Vaccination and Post-COVID-19 Health Security Response in Southeast Asia

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Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
APVAX	–	Asia Pacific Vaccine Access Facility
ASEAN	–	Association of Southeast Asian Nations
COVID-19	–	coronavirus disease
CRISP	–	Cambodia Rapid Immunization Support Project under the APVAX
CSO	–	civil society organization
DMC	–	developing member country
HEAL 2	–	Second Health System Enhancement to Address and Limit COVID-19 under the APVAX
NPI	–	non-pharmaceutical intervention
RECOVER	–	Responsive COVID-19 Vaccines for Recovery under the APVAX
SEHS	–	Human and Social Development Division, Southeast Asia Department
TA	–	technical assistance

NOTE

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

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TRANSACTION TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 55215-001	
Project Name	Supporting Enhanced COVID-19 Vaccination and Post-COVID-19 Health Security Response in Southeast Asia	Department/Division	SERD/SEHS
Nature of Activity	Project Preparation, Capacity Development Facility	Executing Agency	Asian Development Bank
Modality	Facility		
Country	REG (CAM, INO, LAO, PHI, THA, TIM, VIE)		
2. Sector	Subsector(s)	ADB Financing (\$ million)	
✓ Health	Disease control of communicable disease		3.00
	Health system development		2.00
		Total	5.00
3. Operational Priorities		Climate Change Information	
✓ Addressing remaining poverty and reducing inequalities		GHG Reductions (tons per annum)	0.000
✓ Accelerating progress in gender equality		Climate Change impact on the Project	Low
✓ Fostering regional cooperation and integration			
		ADB Financing	
		Adaptation (\$ million)	0.00
		Mitigation (\$ million)	0.00
		Cofinancing	
		Adaptation (\$ million)	0.00
		Mitigation (\$ million)	0.00
Sustainable Development Goals		Gender Equity and Mainstreaming	
SDG 1.5		Effective gender mainstreaming (EGM)	✓
SDG 3.3, 3.8, 3.d			
SDG 5.6		Poverty Targeting	
SDG 10.2		General Intervention on Poverty	✓
4. Risk Categorization	Complex		
5. Safeguard Categorization	Safeguard Policy Statement does not apply		
6. Financing			
Modality and Sources		Amount (\$ million)	
ADB		5.00	
Transaction technical assistance: Technical Assistance Special Fund		5.00	
Cofinancing		0.00	
None		0.00	
Counterpart		0.00	
None		0.00	
Total		5.00	
Currency of ADB Financing: US Dollar			

I. THE TECHNICAL ASSISTANCE FACILITY

A. Justification

1. The transaction technical assistance (TA) facility will help prepare and/or implement a series of ensuing and ongoing projects that support coronavirus disease (COVID-19) vaccination rollout and expansion.¹ The proposed TA will help ensure that the COVID-19 vaccines procured through the Asian Development Bank (ADB) financing and cofinancing administered by ADB are deployed and administered in an efficient and effective manner, particularly among the poor and vulnerable population of ADB's developing member countries (DMCs) in Southeast Asia.

2. **Alignment with Strategy 2030.** The proposed TA facility is aligned with the following three operational priorities of ADB's Strategy 2030: (i) addressing remaining poverty and reducing inequalities—achieving better health for all, (ii) accelerating progress in gender equality, and (iii) fostering regional cooperation and integration.² It will help align COVID-19 vaccination rollouts with universal health coverage strategies, as support for vaccination rollout also contributes to achieving universal health coverage. The TA facility will also foster private sector and civil society organization (CSO) engagement, given their important roles in vaccination initiatives.

3. **COVID-19 pandemic.** On 11 March 2020, the World Health Organization declared COVID-19 a pandemic. The pandemic caused devastating health impact, with more than 212.54 million confirmed cases and more than 4.44 million deaths globally as of 24 August 2021. Of these, 68.15 million cases and over 1.01 million deaths were in Asia and the Pacific.³ Since July 2021, there have been surges of COVID-19 across Southeast Asia. Daily cases exceeded 50,000 in Indonesia in the middle of July, while Malaysia and Thailand started having more than 10,000 cases during the same period. By the start of August 2021, increasing number of daily cases was happening in the Philippines and Viet Nam (Appendix 1, Figure A1.1).

4. Based on the daily new confirmed COVID-19 cases per million people, Malaysia had days exceeding 700 cases per million in August 2021, approximating peaks of 800 or more cases per million which had taken place in the United Kingdom and the United States. Indonesia and Thailand have reached more than 200 cases per million during some days the month of July 2021. The ratios experienced by these three countries in Southeast Asia are among the highest reached in ADB DMCs, with only around 300 cases per million people in India and Nepal last May 2021 approximating these numbers (Appendix 1, Figure A1.2). These surges are being attributed in part to relaxation of mobility restrictions and community quarantines,⁴ and partly due to the spread of more transmissible variants.⁵

5. The pandemic has resulted in devastating economic impacts. Global economic output contracted by 3.3% in 2020,⁶ with economic output of developing countries in Asia and the Pacific shrinking by 0.2% in 2020.⁷ The mobility and travel restrictions, reduced personal consumption,

¹ The ongoing Asia Pacific Vaccine Access Facility (APVAX) projects do not include support for the activities to be financed under the proposed TA facility. Ensuing APVAX projects may also not finance such activities. A project investment component under the APVAX may potentially finance similar activities; however, such project is yet to be planned and finalized.

² ADB. 2018. [Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific](#). Manila.

³ Our World in Data. [Coronavirus Pandemic \(COVID-19\)](#) (accessed 24 August 2021).

⁴ *Channel News Asia*. 2021. [Bangkok Nightlife Clusters Expose Thailand's COVID-19 Stumbles](#). 15 April.

⁵ D. Pazzibugan. 2021. [Coronavirus Variants Driving Metro Manila Surge – DOH](#). *Inquirer.net*. 23 March.

⁶ International Monetary Fund. 2021. [World Economic Outlook April 2021](#). Washington, DC.

⁷ ADB. 2021. [Asian Development Outlook \(ADO\) 2021: Financing a Green and Inclusive Recovery](#). Manila.

lower manufacturing in key industries including the garment and car industries, and the collapse of tourism revenues caused the Southeast Asian economies to shrink substantially. The economy contracted by 9.6% in the Philippines and 6.1% in Thailand in 2020 (footnote 7).

6. Although Southeast Asian countries have expanded treatment capacities,⁸ the pandemic placed enormous stress on the health systems. It increased the number of hospitalized COVID-19 cases requiring critical care and respiratory support exceeding hospital capacity during certain months of 2021 in Indonesia,⁹ Malaysia,¹⁰ and the Philippines.¹¹ Southeast Asian countries have also expanded their testing and isolation capacities, with increasing numbers of COVID-19 testing laboratories and isolation facilities (footnote 8). However, the usual test positivity rate of Indonesia and the Philippines¹² were mostly beyond the 5% threshold of the World Health Organization.¹³

7. **ADB response.** ADB immediately mobilized financing and technical support to DMCs when the COVID-19 pandemic started. By April 2020, it had made available \$20 billion to help DMCs implement countercyclical expenditure programs to mitigate the impact of the pandemic.¹⁴ ADB provided DMCs with health sector emergency assistance grants and loans, and contingent disaster financing.¹⁵ It supported the private sector response against COVID-19 with direct financing, working capital support, and trade and supply chain finance. It also provided around \$56 million of rapid grants under the Asia Pacific Disaster Response Fund for immediate humanitarian and health emergency expenses to 29 DMCs, and an aggregate of around \$100 million in TA across all DMCs. This includes support for implementation of non-pharmaceutical interventions (NPIs), such as mobility and travel restrictions, physical distancing, expanded testing to detect cases, contact tracing, and quarantine and isolation.

8. **Vaccination and APVAX.** Despite these interventions, the transmission of COVID-19 can only be slowed if the NPIs are complemented by rapid deployment of safe and effective COVID-19 vaccines. NPIs also contribute to adverse economic impacts. Although the complete elimination of COVID-19 is difficult given the highly infectious nature of the virus,¹⁶ vaccination can help to control transmission in combination with NPIs. ADB therefore approved the \$9 billion Asia Pacific Vaccine Access Facility (APVAX) on 14 December 2020 to support DMCs procure and deliver safe, equitable, and effective COVID-19 vaccines. APVAX-financed projects are expected to help DMCs break the chain of virus transmission, save lives, and mitigate the negative economic impacts of COVID-19 by restoring confidence in people's ability to work and travel.

9. **Vaccination rollout.** In March 2021, the Philippines and Indonesia became the first two DMCs to receive support under APVAX. The \$400 million Second Health System Enhancement to Address and Limit COVID-19 under the APVAX (HEAL 2) project is supporting the Philippines

⁸ Center for Strategic and International Studies. [Southeast Asia Covid-19 Tracker](#) (accessed 24 August 2021).

⁹ G. Cahya. 2021. [Indonesia's Hospitals in Covid Crisis as Car Parks Turned into Emergency Rooms](#). *The Guardian*. 3 July.

¹⁰ R. Anand. 2021. [Patients Turned Away as ICU Wards Fill Up in Malaysia](#). *The Straits Times*. 29 May.

¹¹ J. Gotinga. 2021. ['We've Cried Ourselves Dry': COVID Overwhelms Manila hospitals](#). *Aljazeera*. 19 April.

¹² Our World in Data. [Daily Positivity Rate](#) (accessed 24 August 2021).

¹³ The positivity rate will be high if the number of positive tests is too high, or if the number of total tests is too low. A higher test positivity rate suggests higher transmission and that there are likely more people infected with the virus in the community who have not been tested yet. D. Dowdy and G. D'Souza. 2020. [COVID-19 Testing: Understanding the "Percent Positive"](#). *John Hopkins: Bloomberg School of Public Health*. 10 August.

¹⁴ ADB. 2020. [ADB's Comprehensive Response to the COVID-19 Pandemic Policy](#). Manila.

¹⁵ Contingent disaster financing is a quick-disbursing source of ADB financing for DMCs impacted by natural hazards and disasters.

¹⁶ P. Geoffard and T. Philipson. 1996. Disease Eradication: Private versus Public Vaccination. *American Economic Review*. 87(1). pp. 222–230.

and the \$450 million Responsive COVID-19 Vaccines for Recovery Project under the APVAX (RECOVER) is supporting Indonesia. The proposed \$95 million Cambodia Rapid Immunization Support Project under the APVAX (CRISP) is scheduled for approval in 2021.¹⁷ Additional financial assistance is being prepared for Indonesia, and support to other Southeast Asia DMCs to facilitate access to safe and effective vaccines explored.

10. As of 24 August 2021, over 4.9 billion doses of COVID-19 vaccines have been administered globally, with Southeast Asia administering 227.57 million doses. Indonesia has administered over 74 million doses, followed by over 23 million doses by the Philippines. In terms of the percentage of population fully vaccinated, Singapore leads with 76%, followed by Cambodia with 47.7%, and Malaysia with 40% (Table 1).

Table 1: Status of COVID-19 Vaccination Rollout in Southeast Asia

Countries	Average Daily Number of Doses Administered	Total Number of Doses Administered	Population Given At Least One Dose (%)	Population Fully Vaccinated (%)
Singapore	23,614	8,734,812	79.9	76.0
Cambodia	210,651	17,313,877	58.9	47.7
Malaysia	497,105	31,792,363	56.0	40.0
Brunei Darussalam	5,862	246,716	39.3	14.3
Lao PDR	9,730	2,050,711	29.5	13.8
Philippines	368,897	30,389,160	17.4	12.2
Indonesia	792,069	89,153,125	21.5	11.8
Timor-Leste	6,834	491,569	27.0	11.1
Thailand	599,876	26,832,179	28.1	8.2
Myanmar	3,666	3,500,000	3.5	2.9
Viet Nam	375,983	17,065,896	15.8	1.9

COVID-19 = coronavirus disease, Lao PDR = Lao People's Democratic Republic.

Source: Bloomberg. [More Than 4.45 Billion Shots Given: Covid-19 Tracker](#) (accessed on 24 August 2021).

11. Studies show that the vaccination rollout in Southeast Asia has been relatively slow and staggered amid secondary waves of the virus, and that women and girls are impacted by gaps both in the supply and demand side, hampering equitable distribution of the vaccines.¹⁸ Southeast Asia still needs to vaccinate millions more in the coming months. This entails responding to several challenges—from adapting to existing vaccine distribution approaches and establishing new ones to implementing national vaccine information systems. Vaccine hesitancy needs to be addressed, while building up vaccine demand and ensuring compliance with two-dose regimen. As of May 2021, more than 60% of the populations of Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam have expressed their willingness to take COVID-19 vaccines,¹⁹ but there is a need to increase willingness to be vaccinated.

12. **Constraints on vaccination deployment.** Southeast Asia DMCs need to strengthen inefficient vaccine supply chain, cold chain, transport, and storage systems. Countries like the Philippines have brought in the private sector to support vaccine storage and distribution, building on their experience of bringing in the private sector to expand testing for COVID-19 vaccines.²⁰

¹⁷ ADB. [Philippines: Second Health System Enhancement to Address and Limit COVID-19 under the Asia Pacific Vaccine Access Facility](#); ADB. [Indonesia: Responsive COVID-19 Vaccines for Recovery Project under the Asia Pacific Vaccine Access Facility](#); and ADB. Forthcoming. Cambodia Rapid Immunization Support Project under the Asia Pacific Vaccine Access Facility.

¹⁸ Asia-Pacific Gender in Humanitarian Action Working Group. 2021. [Gender and COVID-19 Vaccines: Listening to Women-Focused Organizations in Asia and the Pacific](#). Bangkok.

¹⁹ YouGov. [COVID-19 Vaccination Willingness](#) (accessed on 24 August 2021).

²⁰ Thinkwell Global. 2020. [Harnessing Public-Private Partnership for Expanded COVID-19 Testing in the Philippines](#). Quezon City.

However, there is a need to strengthen government vaccine logistics systems to help ensure continuing vaccinations to address COVID-19 beyond 2021 and to respond to any future health outbreaks, which can be managed by vaccines. Also, despite ongoing efforts, there is still a lack of sex-disaggregated data on testing, cases, vaccines, and mortality in the region. Of the 11 countries in the Asia and Pacific region that are included in the COVID-19 Sex-Disaggregated Data Tracker—the world’s largest database of sex-disaggregated data on COVID-19²¹—there is no Southeast Asian country that consistently reports on COVID-19 vaccinations.

13. Indonesia is building upon its existing SMILE²² vaccine information system, and the Philippines started a new Vaccine Information Management System. Both countries have been able to provide timely updates on vaccine deployment, but these information systems need to be strengthened as daily vaccinations are increased to a million in Indonesia, and half a million in the Philippines. Similar challenges are faced by other Southeast Asia DMCs as they scale up daily vaccinations of their population. Additional challenges are expected as DMCs expand vaccinations to those younger than 18 years of age.

14. COVID-19 vaccination rollouts require increasing the number of health workers and vaccinators, and vaccination sites. Countries have used shopping malls, convention centers, sports stadiums, and other large buildings to complement hospitals and health centers as vaccination centers. The Philippines²³ and Thailand,²⁴ for instance, are using malls as large-scale vaccination sites. However, all these vaccination centers, and future vaccination sites such as schools, need adequate staff, and recruiting a sufficient number of vaccinators is a challenge.

15. Southeast Asia DMCs must implement rigorous monitoring of adverse events after vaccination. They should also be able to respond to an evolving pandemic and vaccine landscape by initiating or continuing contingency planning to address the (i) rapid emergence of new and possibly more transmissible COVID-19 variants, (ii) insufficient evidence of the duration of immunity conferred by currently available vaccines, and (iii) availability and efficacy of second-generation vaccines. Given that herd immunity will not be possible if children under 18 years of age remain unvaccinated, Southeast Asia DMCs need to begin planning the vaccination of this age group, once all the necessary regulatory approvals have been obtained. They also need to make decisions on the potential introduction of booster shots. All these existing or potential barriers, bottlenecks, and challenges to vaccination rollout will need to be addressed as DMCs design and/or implement ongoing and future APVAX projects.

16. **Need for technical assistance.** The *Asian Development Outlook 2021 Supplement* reiterates the critical role of rapid vaccine deployment in economic recovery with its updated projections of economic growth of 7.2% from an initial projection of 7.3% in developing countries of Asia and Pacific in 2021.²⁵ The COVID-19 outbreaks and surges need to be curbed by, among others, the rapid deployment and administration of COVID-19 vaccines as NPIs and related restrictions have contributed to economic contraction. Because of the reimposition of these restrictions in some countries in Southeast Asia, the forecast for Southeast Asian growth was downgraded to 4.0% from 4.4% in 2021 (footnote 25). In addition to helping DMCs mobilize

²¹ The database is produced by [Global Health 50/50](#), the [African Population and Health Research Center](#), and the [International Center for Research on Women](#).

²² Sistem Monitoring Imunisasi Logistik secara Elektronik (SMILE) is an innovative technological solution that aims to strengthen the immunization supply chain system in Indonesia.

²³ Ayalaland. 2021. [Ayala Land Supports Vaccine Roll-out in its Various Developments](#). Makati.

²⁴ S. Wancharoen. 2021. [Bangkok Adds More Jab stations](#). *Bangkok Post*. 8 May.

²⁵ ADB. July 2021. [Asia Development Outlook \(ADO\) 2021 Supplement: Renewed Outbreaks and Divergent Recoveries](#). Manila.

financing from APVAX to support their timely procurement of COVID-19 vaccines, provision of TA to support effective and efficient deployment and administration of vaccination is critical. TA projects to be provided under the proposed TA facility will support implementation of the APVAX projects and the overall COVID-19 vaccination rollouts in Southeast Asia DMCs.

17. **ADB technical assistance.** The proposed TA facility will help Southeast Asia DMCs implement CRISP, RECOVER, and HEAL 2 and develop other APVAX projects (para. 9). It will: (i) help improve logistics management and delivery of vaccines, and the implementation and monitoring of vaccination prioritization plans; (ii) strengthen national regulatory authorities and implementation of medical waste management programs; (iii) support contingency planning to address variants of COVID-19, introduction of boosters and second-generation vaccines, and inclusion of children less than 18 years of age in national vaccination programs; (iv) support investments in vaccine information systems and strengthen disease surveillance systems, laboratory testing capacities, skills, and expertise of health workers, 97% of whom are women; (v) support the ongoing efforts of the Association of Southeast Asian Nations (ASEAN) to strengthen regional health security including supporting the planned ASEAN Regional Center on Public Health Emergencies and Emerging Diseases;²⁶ (vi) facilitate sharing of best practices among countries such as setting up of a Southeast Asia-wide vaccine and health security dashboard; (vii) support partnerships with the private sector and CSOs, given their critical role in most if not all stages of vaccination efforts, from production, logistics, storage, to last-mile delivery; and (viii) mobilize resources to ensure that national vaccination strategies and policies are inclusive and gender-responsive, and that sex-disaggregated data is collected, monitored, and analyzed for Southeast Asia DMCs.

18. **Rationale for a regional transaction TA facility.** The regional TA facility approach is suitable as it will mobilize consultant resources to address common issues faced in rolling out COVID-19 vaccination and strengthen preparedness for future potential outbreaks, thereby enhancing project design and efficiency of health projects and support policy-related activities across Southeast Asia DMCs. The TA facility will bridge capability gaps which may emerge as DMCs deploy vaccination, by rapidly bringing in international expertise not available in-country and promptly mobilizing national expertise. The TA facility will also foster knowledge sharing and transfer across countries and support the implementation of Greater Mekong Subregion Health Cooperation Strategy 2019–2023. It will also reduce transaction costs compared to resources required for separate stand-alone transaction TAs.

B. Outputs and Activities

19. **Output 1: Design and development of new APVAX projects (rapid response component and project investment component) and post-COVID-19 health security projects and programs strengthened.** This output will support the preparation of new APVAX projects including the second APVAX project for Indonesia, potential APVAX projects in other DMCs in Southeast Asia, and possible additional financing of the current or future APVAX projects. It will also support the preparation of post-COVID-19 pandemic health security projects. The activities will include (i) assessing health systems, including health and vaccine information systems, logistics and cold chain, health and vaccine financing systems, surveillance including laboratory systems, and other service delivery capacities; (ii) assessing vaccine demand; (iii) assessing vaccine manufacturing capacity; (iv) determining implementation barriers and bottlenecks including those that deter access of women to COVID-19 vaccination and addressing them in project designs; (v) preparing contingency plans including plans for climate adaptation

²⁶ ASEAN. 2020. [ASEAN Strategic Framework for Public Health Emergencies](#). Jakarta.

and mitigation; (vi) identifying and enabling participation of the private sector and CSOs; (vii) conducting rapid post-vaccination to inform new projects; and (viii) identifying key areas for ADB financing and technical support. Output 1 will require about \$1,450,000.

20. Output 2: Implementation of APVAX and post-COVID-19 health security projects and programs in Southeast Asia developing member countries supported. This output will support implementation of the Cambodia CRISP, Indonesia RECOVER, Philippines HEAL 2, and other APVAX and post-COVID-19 health security projects in Southeast Asia DMCs. For CRISP, the activities will include supporting (i) project procurement, (ii) financial management of the vaccine deployment, (iii) monitoring and evaluation of the vaccination plan, and (iv) participation of the private sector and CSOs. For RECOVER, the activities will (i) support the monitoring of the vaccination rollout, and (ii) strengthen the vaccine-related health information systems and vaccine logistic systems. For HEAL 2, the activities will include supporting (i) vaccine communication systems including the development of communication tools that will maximize the vaccination of indigenous peoples, people living in remote areas and communities, and other vulnerable sectors; (ii) subnational vaccine deployment; (iii) vaccine certificate system; (iv) increasing private sector and CSO participation; (v) integrating gender and social inclusion, including implementation of any gender action plans; and (vi) implementing medical waste management plans, and vaccination-related climate adaptation and mitigation measures. Activities under future projects will be included once determined. Output 2 will require about \$2,300,000.

21. Output 3: Knowledge and best practices on COVID-19 vaccination deployment documented, developed, disseminated, and promoted. This output will support the documentation, dissemination, promotion and adoption of innovative approaches and best practices for COVID-19 vaccination among Southeast Asia DMCs being supported by APVAX and post-COVID-19 regional health security projects. It will also develop innovative approaches responding to the needs of DMCs. This will include: (i) vaccine deployment administration models, particularly those that ensure deployment to women and vulnerable populations; (ii) understanding gender-related issues in designing incentives and other measures addressing vaccine hesitancy; (iii) involvement of the private sector and CSOs in vaccination access and deployment; (iv) scaling up of country-level and/or region-wide COVID-19 vaccine manufacturing; (v) gender-sensitive vaccination communications (demand generation and responding to vaccine hesitancy); (vi) cold chain and logistics including region-wide logistics; (vii) vaccine information systems; (viii) relationship of national and local governments in vaccine deployment; (ix) monitoring adverse events; (x) gender-inclusive post-COVID-19 recovery plans; and (xi) harnessing the possible contributions of COVID-19 vaccination to increasing climate readiness of the health sector.

22. In coordination with ADB's Economic Research and Regional Cooperation Department, the TA will support impact evaluation of APVAX projects in Southeast Asia to further identify best practices. It will also support the development of country-level, region-wide, sex-disaggregated dashboards of COVID-19 vaccine deployment and other key health security indicators which will help tracking of these vaccines when they become routine vaccination. Customization of existing dashboards will also be considered. The promotion of best practices and development of the dashboards will be implemented in coordination with ASEAN and ADB's Regional Cooperation and Operations Coordination Division. Output 3 will tentatively require about \$1,250,000.

C. Cost and Financing

23. The TA facility is estimated to cost \$5,000,000 which will be financed on a grant basis by ADB's TA Special Fund (\$2 million from TASF-7 and \$3 million from TASF-other sources). The

key expenditure items are listed in Appendix 2. The relevant governments will provide counterpart support in the form of counterpart staff, office space, office supplies, secretarial and coordination assistance, and other in-kind contributions. The governments have been informed that approval of the TA does not commit ADB to finance any ensuing project.

D. Implementation Arrangements

24. ADB will administer the TA and will be the executing agency. In coordination with resident missions, country offices, and the Regional Cooperation and Operations Coordination Division, the Human and Social Development Division (SEHS) of ADB's Southeast Asia Department will implement the TA and will be accountable for the outputs. SEHS will carry out overall TA administration, including the recruitment and supervision of the vaccine eco-system strengthening consulting firm and international individual consultants. SEHS will coordinate with other ADB departments²⁷ and may delegate to resident missions and country offices the recruitment and supervision of national individual consultants, as well as coordination with government agencies and stakeholders. There will be three national consultants for a total of 64 person-months who will support the coordination of TA activities, engagement with DMCs, and supervision of consultants.²⁸ Implementation arrangements are summarized in Table 2.

Table 2: Implementation Arrangements

Aspects	Arrangements		
Indicative implementation period	September 2021 to September 2024		
Executing agency	ADB		
Implementing agency	Human and Social Development Division, Southeast Asia Department, with delegation of agreed tasks to resident missions and country offices		
Consultants	To be selected and engaged by ADB		
	Firm: QCBS with STP	Consulting Firm for Vaccine Eco-system Strengthening: 109 person-months	\$1,085,000
	Individual: ICS	International expertise: 48 person-months	\$672,000
	Individual: ICS	National expertise: 339 person-months	\$1,695,000
Disbursement	Disbursement of technical assistance resources will follow ADB's <i>Technical Assistance Disbursement Handbook (2020, as amended from time to time)</i> .		

ADB = Asian Development Bank, ICS = individual consultant selection, QCBS = quality- and cost-based selection, STP = simplified technical proposal.

Source: ADB.

25. **Consulting services.** ADB will engage the consultants following the ADB Procurement Policy (2017, as amended from time to time) and its associated staff instructions (footnote 26). The consulting firm will be selected using quality- and cost-based selection with simplified technical proposal. The TA facility will support the design and implementation of ongoing and future APVAX and future post-COVID-19 health security projects and programs.

II. THE PRESIDENT'S DECISION

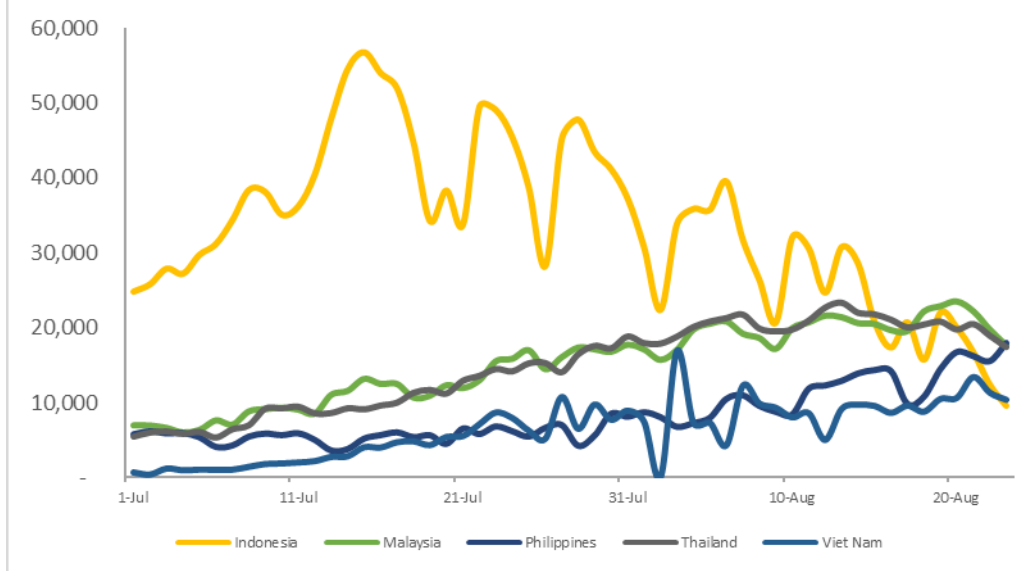
26. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$5,000,000 on a grant basis for Supporting Enhanced COVID-19 Vaccination and Post-COVID-19 Health Security Response in Southeast Asia, and hereby reports this action to the Board.

²⁷ Includes the Economic Research and Regional Cooperation Department; Office of Public–Private Partnership; Private Sector Operations Department; Procurement, Portfolio and Financial Management Department; and Sustainable Development and Climate Change Department.

²⁸ Terms of Reference for Consultants (accessible from the list of linked documents in Appendix 4).

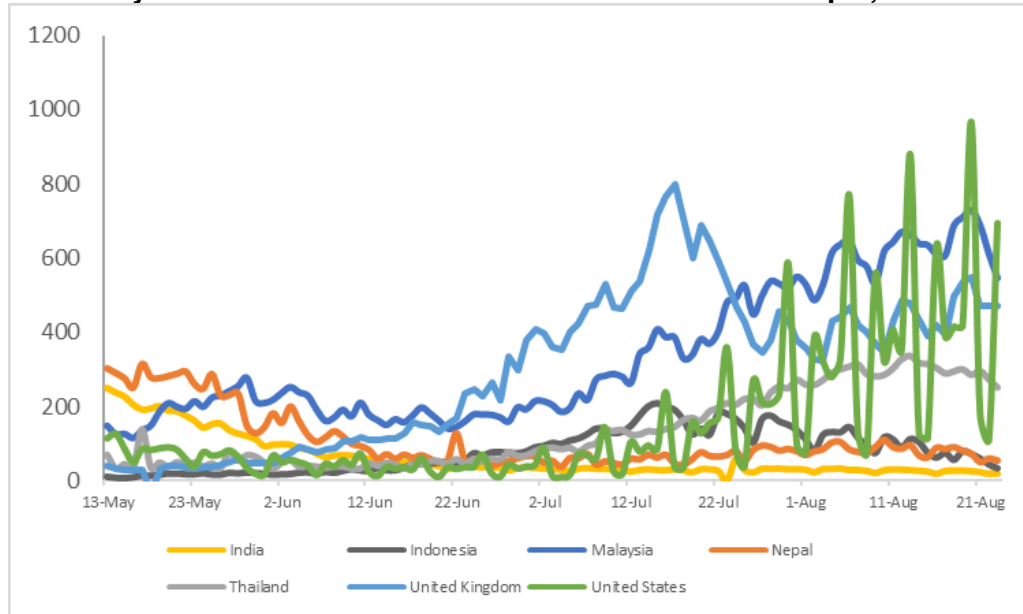
COVID-19 STATISTICS IN SOUTHEAST ASIA COUNTRIES

Figure A1.1: Daily New Confirmed COVID-19 Cases in Southeast Asia, selected countries



COVID-19 = coronavirus disease.
 Source: Office for Coordination of Humanitarian Affairs. [Novel Coronavirus \(COVID-19\) Cases Data](#) (accessed 24 August 2021).

Figure A1.2: Daily New Confirmed COVID-19 Cases Per Million People, selected countries



COVID-19 = coronavirus disease.
 Source: Our World in Data. [Daily New Confirmed COVID-19 Cases](#) (accessed 24 August 2021).

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Amount
Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	1,512
ii. National consultants	1,940
b. Out-of-pocket expenditures	
i. International and local travel	495
ii. Reports and communications	50
2. Training, seminars, conferences ^b	200
3. Surveys	200
4. Miscellaneous administration and support costs ^c	103
5. Contingencies	500
Total	5,000

Note: The relevant governments will provide counterpart support in the form of counterpart staff, office space, office supplies, secretarial and coordination assistance, and other in-kind contributions.

^a Financed by the Asian Development Bank's Technical Assistance Special Fund (\$2 million from TASF-7 and \$3 million from TASF-other sources).

^b Includes remuneration for, and travel costs of, facilitators and resource persons, venue rental, and other related costs.

^c Includes editing, printing, and translation costs.

Source: Asian Development Bank estimates.

PROJECTS UNDER TECHNICAL ASSISTANCE FACILITY

Table A3.1: Indicative Consultants' Input Allocation
(person-month)

Item	Total	CAM	INO	LAO	PHI	THA	TIM	VIE	REG
Vaccine Eco-system Strengthening Firm									
International									
Vaccine manufacturing	6								6
Vaccine deployment	6								6
Health logistics/supply chain	6								6
Human resources for health	6								6
Monitoring and evaluation	6								6
Disease surveillance	6								6
Health laboratory systems	6								6
Health regulations	6								6
Data Analyst	8								8
Web Developer	4								4
Total International (a)	60								60
National									
Health System	49	7	7	7	7	7	7	7	
Total National (b)	49	7	7	7	7	7	7	7	
Individual consultants									
International Individual									
Health financing	12								12
Digital Health	12								12
Health communications	12								12
Private health sector	12								12
Total International Individual (c)	48								48
National Individual									
TA coordination	24								24
Coordination support	40								40
Procurement	14	2	2	2	2	2	2	2	
Gender/social development	21	3	3	3	3	3	3	3	
Environmental/safeguards	21	3	3	3	3	3	3	3	
Financial management	16	2	3	2	3	2	2	2	
Economic analysis	10	1	2	1	2	1.5	1.5	1	
Health logistics/supply chain	21	3	3	3	3	3	3	3	
Human resources for health	12		6		6				
Health financing	12		6		6				
Health information systems	12		6		6				
Private health sector	12		6		6				
Disease surveillance	12		6		6				
Health communications	28	4	4	4	4	4	4	4	
Monitoring and Evaluation/ Pharmacovigilance	14	2	2	2	2	2	2	2	
Health security	70	10	10	10	10	10	10	10	
Total National Individual (d)	339	30	62	30	62	30.5	30.5	30	64
TOTAL (a+b+c+d)	496	37	69	37	69	37.5	37.5	37	172

CAM = Cambodia, INO = Indonesia, LAO = Lao People's Democratic Republic, PHI = Philippines, REG = regional, TA = technical assistance, THA = Thailand, TIM = Timor-Leste, VIE = Viet Nam.

Source: Asian Development Bank.

Table A3.2: Indicative Technical Assistance Budget Allocation
(\$'000)

Item	Total	CAM	INO	LAO	PHI	THA	TIM	VIE	REG
Training, seminars, and conferences	200								200
Surveys	200		100		100				
Miscellaneous administration and support costs	103	13	19	13	19	13	13	13	
Contingencies	500								500

CAM = Cambodia, INO = Indonesia, LAO = Lao People's Democratic Republic, PHI = Philippines, REG = regional, THA = Thailand, TIM = Timor-Leste, VIE = Viet Nam.

Source: Asian Development Bank estimates.

Table A3.3: Projects Supported by the Technical Assistance Facility

Country	Title	Risk Categorization	Indicative/ Actual Approval Year
Preparatory support			
Indonesia	Rapid Immunization Support for Economic Recovery under the APVAX	Complex	2021
DMC1 ^a	APVAX ^a	Complex	2022
DMC2 ^a	APVAX ^a	Complex	2022
DMC3 ^a	APVAX ^a	Complex	2022
DMC4 ^a	APVAX ^a	Complex	2022
DMC or Regional ^b	Post-COVID-19 health security projects and programs	TBD	TBD
Implementation support			
Cambodia	Cambodia Rapid Immunization Support Project under APVAX	Complex	2021
Indonesia	Responsive COVID-19 Vaccines for Recovery under the APVAX (Approved)	Complex	2021
Philippines	Second Health System Enhancement to Address and Limit COVID-19 under the APVAX (Approved)	Complex	2021

APVAX = Asia Pacific Vaccine Access Facility, COVID-19 = coronavirus disease, DMC = developing member country, TBD = to be determined.

^a Specific DMCs and titles to be determined.

^b May be regional or for specific countries. Specific DMCs or regional grouping to be determined later

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/LinkedDocs/?id=55215-001-TARreport>

1. Terms of Reference for Consultants