



# Report and Recommendation of the President to the Board of Directors

---

**INTERNAL**

Project Number: 55104-001  
January 2022

## Proposed Loan and Administration of Loan Kingdom of Cambodia: Cambodia Rapid Immunization Support Project under the Asia Pacific Vaccine Access Facility

Distribution of this document is limited until it has been approved by the Board of Directors. Following such approval, this document will be reclassified as public and disclosed in accordance with ADB's Access to Information Policy.

Asian Development Bank

## **CURRENCY EQUIVALENTS**

(as of 6 January 2022)

Currency unit	–	riel (KR)
KR1.00	=	\$0.00025
\$1.00	=	KR4,074.73

## **ABBREVIATIONS**

ADB	–	Asian Development Bank
AIIB	–	Asian Infrastructure Investment Bank
APVAX	–	Asia Pacific Vaccine Access Facility
COVAX	–	COVID-19 Vaccines Global Access
COVID-19	–	coronavirus disease
GDP	–	gross domestic product
MOH	–	Ministry of Health
NIP	–	National Immunization Program
RRC	–	rapid response component
TA	–	technical assistance
UNDP	–	United Nations Development Programme
UNICEF	–	United Nations Children’s Fund
WHO	–	World Health Organization

## **NOTE**

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

<b>Vice-President</b>	Ahmed M. Saeed, Operations 2
<b>Director General</b>	Ramesh Subramaniam, Southeast Asia Department (SERD)
<b>Deputy Director General</b>	Winfried Wicklein, SERD
<b>Directors</b>	Ayako Inagaki, Human and Social Development Division (SEHS), SERD Anthony Robert Gill, Officer-in-Charge, Cambodia Resident Mission (CARM), SERD
<b>Team leader</b>	Rikard Elfving, Senior Social Sector Specialist, SEHS, SERD
<b>Team members</b>	Meenakshi Ajmera, Principal Safeguards Specialist, Office of Director General (SEOD), SERD Michiel Van der Auwera, Senior Social Development Specialist (Social Protection), Social Development Thematic Group, Sustainable Development and Climate Change Department (SDCC) Eduardo Banzon, Principal Health Specialist, SEHS, SERD Md. Abul Basher, Natural Resources and Agriculture Specialist, Rural Development and Food Security (Agriculture) Thematic Group, SDCC Robert Boothe; Senior Planning and Policy Economist; Strategy, Policy and Business Process Division; Strategy, Policy and Partnerships Department (SPD) Arah Camille Buena; Associate Portfolio Management Analyst; Portfolio, Results, and Quality Control Unit; Pacific Department Jenny Yan Yee Chu; Procurement Specialist; Procurement Division 2 (PFP2), Procurement, Portfolio and Financial Management Department (PPFD) G. Oliver Domagas, Senior Financial Control Specialist, Loan and Grant Disbursement Section, Controller's Department <sup>a</sup> Dara Dy, Operations Assistant, CARM, SERD Haidy Ear-Dupuy, Senior Social Development Specialist (Core Labor Standards), Safeguards Division (SDSS), SDCC Hannah Althea Estipona, Operations Assistant, Regional Cooperation and Operations Coordination Division, SERD David Freedman, Country Economist, CARM, SERD Nguyen Ba Hung, Senior Regional Cooperation Specialist, Regional Cooperation and Integration Thematic Group, SDCC Sambath Kim, Senior Social Development Officer (Safeguards), CARM, SERD Mariangela Paz Medina, Project Analyst, SEHS, SERD Kevin Moore, Principal Procurement Specialist, PFP2, PPFD Antoine Morel, Principal Environment Specialist, SEOD, SERD

Christopher Morris, Principal Social Development Specialist (NGO and Civil Society Center), NGO and Civil Society Center, SDCC  
Kaukab Naqvi, Senior Economist, Economic Analysis and Operational Support Division, Economics Research and Regional Cooperation Department  
Hyun Chang Park, Public Management Specialist (SOE Reforms), Governance Thematic Group, SDCC  
Daniele Quaggiotto, Senior Counsel, Office of the General Counsel  
Myra Evelyn Ravelo, Financial Management Specialist, Public Financial Management Division, PPF  
Francesco Ricciardi, Senior Environment Specialist, SDSS, SDCC  
Erwin Salaveria, Partnerships Officer, Strategic Partnerships Division, SPD  
Malika Shagazatova, Social Development Specialist (Gender and Development), Gender Equity Thematic Group, SDCC  
Meekyung Shin, Education Specialist, Education Sector Group, SDCC  
Sok Sokunthea, Senior Procurement Officer, CARM, SERD  
Markus Vorpahl, Senior Social Development Specialist, Transport and Communications Division, SERD  
Shekinah Wenceslao, Associate Project Analyst, SEHS, SERD  
Jinmiao Xu, Energy Specialist, Energy Sector Group, SDCC  
Seok Yong Yoon, Principal Public Management Specialist (eGovernance), Digital Technology for Development Unit, SDCC  
**Peer reviewer** Rui Liu, Health Specialist, Health Sector Group, SDCC

<sup>a</sup> Outposted to the Viet Nam Resident Mission.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

## CONTENTS

	<b>Page</b>
PROJECT AT A GLANCE	
I. THE PROPOSAL	1
II. THE PROJECT	2
A. Rationale	2
B. Project Description	7
C. Value Added by ADB	7
D. Summary Cost Estimates and Financing Plan	8
E. Implementation Arrangements	9
III. DUE DILIGENCE	10
A. Economic Viability	10
B. Sustainability	11
C. Governance	11
D. Poverty, Social, and Gender	12
E. Safeguards	12
F. Summary of Risk Assessment and Risk Management Plan	13
IV. ASSURANCES AND CONDITIONS	14
V. RECOMMENDATION	14
APPENDIXES	
1. Design and Monitoring Framework	15
2. List of Linked Documents	17

## PROJECT AT A GLANCE

<b>1. Basic Data</b>		<b>Project Number:</b> 55104-001	
<b>Project Name</b>	Cambodia Rapid Immunization Support Project under the Asia Pacific Vaccine Access Facility	<b>Department/Division</b>	SERD/SEHS
<b>Country Borrower</b>	Cambodia Kingdom of Cambodia	<b>Executing Agency</b>	Ministry of Health
<b>Country Economic Indicators</b>	<a href="https://www.adb.org/Documents/LinkedDocs/?id=55104-001-CEI">https://www.adb.org/Documents/LinkedDocs/?id=55104-001-CEI</a>		
<b>Portfolio at a Glance</b>	<a href="https://www.adb.org/Documents/LinkedDocs/?id=55104-001-PortAtaGlance">https://www.adb.org/Documents/LinkedDocs/?id=55104-001-PortAtaGlance</a>		
<b>2. Sector</b>		<b>ADB Financing (\$ million)</b>	
✓ <b>Health</b>	Disease control of communicable disease		95.00
		<b>Total</b>	<b>95.00</b>
<b>3. Operational Priorities</b>		<b>Climate Change Information</b>	
✓ 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			
		<b>ADB Financing</b>	
		Adaptation (\$ million)	0.00
		Mitigation (\$ million)	0.00
		<b>Cofinancing</b>	
		Adaptation (\$ million)	0.00
		Mitigation (\$ million)	0.00
<b>Sustainable Development Goals</b>		<b>Gender Equity and Mainstreaming</b>	
SDG 1.4		Effective gender mainstreaming (EGM)	✓
SDG 3.3			
SDG 5.c		<b>Poverty Targeting</b>	
SDG 10.2		General Intervention on Poverty	✓
<b>4. Risk Categorization:</b>	Complex		
<b>5. Safeguard Categorization</b>	Environment: C Involuntary Resettlement: C Indigenous Peoples: C		
<b>6. Financing</b>			
<b>Modality and Sources</b>		<b>Amount (\$ million)</b>	
<b>ADB</b>		<b>95.00</b>	
Sovereign Asia Pacific Vaccine Access Facility (Concessional Loan): Ordinary capital resources		95.00	
<b>Cofinancing</b>		<b>50.00</b>	
Asian Infrastructure Investment Bank - Asia Pacific Vaccine Access Facility (Partial ADB Administration)		50.00	
<b>Counterpart</b>		<b>8.50</b>	
Government		8.50	
<b>Total</b>		<b>153.50</b>	
<b>Currency of ADB Financing:</b> US Dollar			

## I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan to the Kingdom of Cambodia for the Cambodia Rapid Immunization Support Project under the Asia Pacific Vaccine Access Facility. The report also describes the proposed administration of a loan to be provided by the Asian Infrastructure Investment Bank (AIIB) for the Cambodia Rapid Immunization Support Project under the Asia Pacific Vaccine Access Facility, and if the Board approves the proposed loan, I, acting under the authority delegated to me by the Board, approve the administration of the AIIB loan. The project will provide Cambodia with financing for vaccine procurement and logistics based on an agreed list of eligible expenditures, focusing on vaccination of 10.12 million people, comprising of booster doses for adult population and children below 5.<sup>1</sup> The project is aligned with the following key operational priorities of the Asian Development Bank (ADB) Strategy 2030: (i) addressing remaining poverty and reducing inequalities, (ii) accelerating progress in gender inequalities, and (iii) fostering regional cooperation and integration.<sup>2</sup> The project will contribute to the ADB country partnership strategy for Cambodia, 2019–2023 through strengthening human capital.<sup>3</sup> Procurement and deployment of additional vaccines under the project will allow Cambodia to achieve its objective of strengthening population immunity in 2022–2023.

2. The project fulfills all Asia Pacific Vaccine Access Facility (APVAX) access criteria as shown in Table 1.

**Table 1: Compliance with Access Criteria of the Asia Pacific Vaccine Access Facility**

Access Criteria	ADB Staff Assessment
Demonstrated adverse impact of COVID-19	The COVID-19 pandemic has adversely affected the Cambodian economy, which contracted by 3.1% in 2020 due to declines in major industries such as construction, tourism, and merchandise exports. <sup>a</sup> Most of the economic sectors worst affected by COVID-19, such as footwear, textiles, and garments, are dominated by women. A new outbreak in 2021 severely stressed the healthcare system and resulted in widespread closures of schools and businesses. <sup>b</sup> As of July 2021, 84% of households surveyed reported a decreased income, and 64% of those reported a decrease greater than 50%. <sup>c</sup>
Completed needs assessment	Cambodia assessed vaccine needs using the WHO-developed COVID-19 Vaccine Introduction Readiness Assessment Tool in January 2021. The assessment found that most indicators were complete or at an advanced level and outstanding actions were addressed end of March 2021. <sup>d</sup>
National vaccination allocation plan	The MOH issued the NDVP in January 2021, detailing the financing and operational arrangements for the full vaccination of 10 million Cambodians above the age of 18 by the end of 2021, a goal which was achieved by the end of the third quarter of 2021. In accordance with the WHO Strategic Advisory Group of Experts on Immunization values framework for COVID-19 vaccination allocation, the vaccination campaign has targeted both priority areas with high COVID-19 cases and priority target populations such as health workers, other frontline workers, people above 60 years of age, and those with chronic illnesses. The MOH has issued various updates to the NDVP as the epidemic evolved. <sup>e</sup> In July 2021, Cambodia began vaccination of children aged 12–17 and in September 2021, the government released a strategy to administer booster doses to all adults and also began vaccination of children aged 5–11. It plans to vaccinate children below 5 once such vaccines have been approved. By 1 December 2021, over 80% of Cambodia's total population of 16.7 million was fully vaccinated. <sup>f</sup>

<sup>1</sup> Indicative Master List of Eligible Items and Agreed List of Acceptable Expenditure Items ('Positive List') for ADB-Financing under the Rapid Response Component (accessible from the list of linked documents in Appendix 2).

<sup>2</sup> Contribution to Strategy 2030 Operational Priorities (accessible from the list of linked documents in Appendix 2).

<sup>3</sup> ADB. 2020. [Country Partnership Strategy: Cambodia, 2019–2023—Inclusive Pathways to a Competitive Economy](#). Manila.

Access Criteria	ADB Staff Assessment
Incremental medical waste management plan	Cambodia has established a robust policy framework regulating health care waste management. The vaccination plan also defines the immunization waste management requirements for the participating health care facilities including referral hospitals, health centers, and mobile vaccination centers. <sup>e</sup> The MOH is addressing health care waste management capacity disparities with support from development partners such as ADB, the World Bank, and the United Nations Development Programme.
Governor's letter	The letter confirms the government's commitment to implementing the vaccination plan, including its prioritization plan, and compliance with the APVAX vaccine eligibility criteria.
Established effective development partner coordination mechanism with clear ADB role	ADB actively contributes to the Health Partners Working Group led by WHO, which is the formal coordination mechanism between the development partners and the government. Representatives from this group also provide advice to the National Immunization Technical Advisory Group and Interagency Coordination Committee for Cambodia's National Immunization Program.

ADB = Asian Development Bank, APVAX = Asia Pacific Vaccine Access Facility, COVID-19 = coronavirus disease, MOH = Ministry of Health, NDVP = National Deployment and Vaccination Plan for COVID-19 Vaccines, WHO = World Health Organization.

<sup>a</sup> ADB. 2021. [Asian Development Outlook](#). Manila.

<sup>b</sup> WHO. [Coronavirus Disease \(COVID-19\) Dashboard](#) (accessed 2 December 2021).

<sup>c</sup> ADB. 2021. [Asian Development Outlook](#). Manila; and ADB. 2021. [COVID-19 Active Response and Expenditure Support Program \(Cambodia\) First Quarterly Monitoring report \(July–September 2020\)](#). Manila.

<sup>d</sup> ADB has confirmed that the vaccine needs assessment and NDVP for Cambodia meet access criterion 2 of the APVAX, as per ADB Sustainable Development and Climate Change Department. 2021. *CAM: Confirmation of Access Criterion 2 for APVAX*. Memorandum. 31 March (internal).

<sup>e</sup> Vaccination Plan (accessible from the list of linked documents in Appendix 2).

<sup>f</sup> Cambodia began vaccinating children aged 12 and above in July–August 2021. Cambodia's total population of 16.7 million comprises (i) 10.6 million aged 18 and above; (ii) 1.8 million aged 12–17; (iii) 2.7 million aged 5–11; and (iv) 1.6 million under 5. United Nations Population Division. 2019. *World Population Prospects 2019*. New York.

Source: ADB.

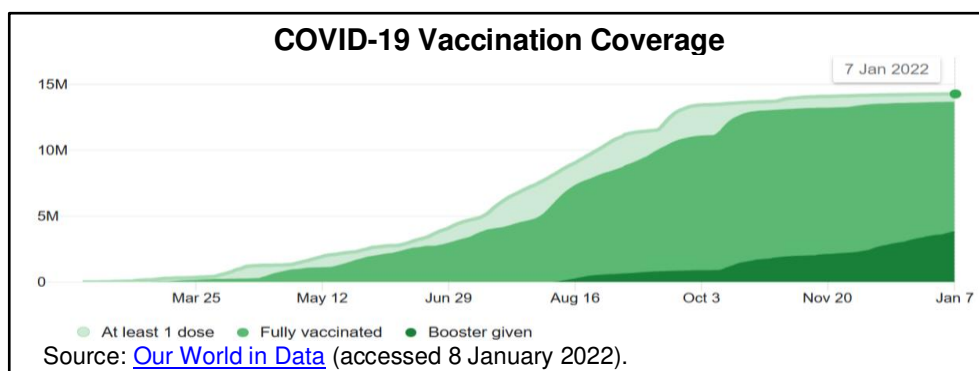
## II. THE PROJECT

### A. Rationale

3. **Background.** Cambodia was largely successful in controlling coronavirus disease (COVID-19) in 2020. An outbreak in February of 2021, however, led to widespread closures of schools and business and a lockdown in Phnom Penh and other heavily impacted areas until the fourth quarter of 2021.<sup>4</sup> As of 3 January 2022, Cambodia had 120,516 confirmed COVID-19 cases and 3,014 deaths. Cambodia launched its vaccination campaign on 10 February 2021 and has administered over 28 million doses, covering over 80% of its total population of 16.7 million. It has also provided booster doses to 21.8% of its population. Despite the country's success in rolling-out COVID-19 vaccination, its health system remains highly vulnerable to a surge in new infections linked to variants such as Delta and Omicron.

<sup>4</sup> World Health Organization (WHO). 2021. *Cambodia Coronavirus Disease 2019 (COVID-19) Situation Report #37*. Geneva.





4. **Impact on the health system.** Sustained community transmission of COVID-19 has overwhelmed Cambodia's under-resourced health system. Prior to COVID-19, there were only eight hospital beds per 10,000 people, with provincial referral hospitals operating with a bed occupancy rate of 87%.<sup>5</sup> District referral hospitals lack facilities for patient isolation and intensive care. With 0.2 doctors and 0.7 nurses per 1,000 people, Cambodia's health workforce density is below the average for lower middle-income countries of 0.6 doctors and 1.3 nurses per 1,000 people.<sup>6</sup> Diversion of limited public health financial and human resources to address COVID-19 cases impacts the overall performance of the health system.

5. **Impact on poor and vulnerable groups.** The projected gross domestic product (GDP) for 2022–2024 is around 14% lower than the pre-COVID-19 forecast.<sup>7</sup> Key industries negatively impacted are tourism, garments, textiles, and footwear.<sup>8</sup> Wage and job losses for domestic and international migrant workers resulting in significantly diminished remittances have further exacerbated the loss of income for households.<sup>9</sup> As of July 2021, 84% of households surveyed reported a decreased income, and 64% of those reported a decrease greater than 50% (footnote 8). The pandemic has reversed 4 years of progress in the Human Development Index, which fell from 0.594 in 2019 to 0.571 in 2020,<sup>10</sup> driven primarily by declines in education indicators caused by school closures. Available data also indicate that certain marginalized and hard-to-reach groups have had more limited access to COVID-19 vaccination.<sup>11</sup>

6. **Impact on gender.** COVID-19 poses a direct risk to health care workers, over half of whom are female in Cambodia, including the majority in junior positions where exposure to infection is the greatest. Frontline health workers have also been subject to extreme stress and mental pressure, given the intensity of Cambodia's COVID-19 vaccination campaign. More young women (80%) than men are employed in pandemic-affected industries (garments, textiles, footwear manufacturing, and tourism).<sup>12</sup> Recent research has also documented COVID-19-

<sup>5</sup> Government of Cambodia, Ministry of Health (MOH). 2016. [Health Strategic Plan 2016–2020: Quality, Effective and Equitable Health Services](#). Phnom Penh.

<sup>6</sup> Organisation for Economic Co-operation and Development and WHO. 2020. *Health at a glance Asia/Pacific. Measuring progress towards universal health coverage*. Paris.

<sup>7</sup> International Monetary Fund (IMF). 2019. [World Economic Outlook, October 2019: Global Manufacturing Downturn, Rising Trade Barriers](#). Washington, DC; and IMF. 2021. [World Economic Outlook: Recovery during a Pandemic—Health Concerns, Supply Disruptions, Price Pressures](#). Washington, DC.

<sup>8</sup> ADB. 2021. [Asian Development Outlook](#). Manila; and ADB. 2021. [COVID-19 Active Response and Expenditure Support Program \(Cambodia\) First Quarterly Monitoring report \(July–September 2020\)](#). Manila.

<sup>9</sup> World Bank. 2020. [The Socioeconomic Impacts of COVID-19 on Households in Cambodia – Results of the High-Frequency Phone Survey of Households Round 2 \(17 August–7 September 2020\)](#). Washington, DC.

<sup>10</sup> United Nations Development Programme. 2021. [Projected impacts of COVID-19 on the 2020 Human Development Index in Cambodia and its neighbors](#). Phnom Penh.

<sup>11</sup> WHO. 2021. *COVID-19 Vaccine and Vaccination Roll-out Update, HPG Meeting 28 October 2021*. Phnom Penh.

<sup>12</sup> International Labour Organization. 2018. [Cambodia Garment and Footwear Sector Bulletin](#). Phnom Penh.

induced increases in gender-based violence and cases of anxiety and depression in vulnerable migrant women.<sup>13</sup> Although the share of those vaccinated to date who are women (50%) is in line with the female share of the population (51%), there is a small gap with women accounting for only 45% of those receiving booster doses. Data indicates certain categories of women (pregnant, lactating, and disabled) are overrepresented among the unvaccinated population (footnote 11). Extending vaccination to children aged below 5 will be critical to ensure that women can return to the workforce unhindered by the gendered burden of childcare and home schooling.

7. **Government coordination for COVID-19 vaccination.** There are four coordination structures in place: (i) the Inter-ministerial Committee to Combat COVID-19, which provides policy guidance and overall management of the vaccination plan;<sup>14</sup> (ii) the COVID-19 Vaccine Introduction Preparedness and Implementation Task Force, which reviews candidate vaccines, develops operational guidelines, and oversees monitoring and evaluation; (iii) the Committee for Nationwide Implementation of COVID-19 Vaccination, which oversees the geographic allocation of vaccine doses and coordination with subnational authorities; and (iv) the Inter-ministerial Task Force for Review and Negotiation of COVID-19 Vaccines Purchase. The principal mechanism for coordination between these government structures and development partners is the Health Partners Working Group (Table 1).

8. **Government's COVID-19 vaccination deployment plan.** The goal of the National Deployment and Vaccination Plan for COVID-19 Vaccines was to save lives and reduce the severity of health and social disruptions caused by COVID-19 by vaccinating 10 million Cambodians aged 18 and above, a target achieved by September 2021. The vaccination plan was updated to accelerate vaccination delivery mechanisms, shifting the prioritization to focus on high caseload geographic areas, and moving towards vaccinating children and booster doses (Box 1). The Ministry of Health's (MOH) disaggregated data from October 2021 for specific population segments indicate high coverage for healthcare workers (97.6%), people over 60 years old (95.8%), adults 18 and above (96.3%), children aged 12–17 (86.1%), and children aged 5–11 (88.9%).<sup>15</sup>

#### Box 1: Vaccination Plan<sup>a</sup>

*Stage 1 (2021): vaccinate 10 million target population aged 18 and above (63% of total population) and 2 million target population aged 12–17*

- January 2021: National Deployment and Vaccination Plan for COVID-19 Vaccines
- March 2021: Update 1: Master Plan for COVID-19 Vaccination Deployment
- May 2021: Update 2: Strategic Plan for National COVID-19 Vaccination to Establish Herd Immunity in Cambodia
- July 2021: Update 3: Action Plan for COVID-19 Vaccinations for Children/Adolescents aged 12–17

*Stage 2 (2021–2023): extend coverage to 4.5 million target population under the age of 12 and provide booster doses to 16.7 million total population*

- August 2021: Update 4: Announcement on the policy for COVID-19 booster dose
- September-October 2021: Policy on vaccination of children 5–11
- Policy guidance for vaccination of children below 5 (under review)

<sup>a</sup> Vaccination Plan (accessible from the list of linked documents in Appendix 2).

Source: Government of Cambodia, Ministry of Health.

<sup>13</sup> WHO. 2020. [WHO, RGC and partners join forces to offer mental health support to migrant workers and vulnerable groups](#). Geneva.

<sup>14</sup> Government of Cambodia, MOH. 2021. *National Deployment and Vaccination Plan for COVID-19 Vaccines*. Phnom Penh; and Government of Cambodia, MOH. 2021. *Master Plan for COVID-19 Vaccination Deployment*. Phnom Penh.

<sup>15</sup> WHO and United Nations Children's Fund (UNICEF). 2021. *Covid-19 Vaccine and Vaccination Roll-out Update, HPG Meeting 28 October 2021*. Phnom Penh.

9. **Strengthening population immunity for economic recovery.** Cambodia's priority is to expand vaccination beyond the current 80% coverage and to strengthen population immunity considering new variants such as Delta and Omicron. This will require expanding coverage of booster doses and vaccinating children under 5 when vaccines for such age group are approved. As of January 2022, booster doses have been provided to healthcare workers, frontline staff, the elderly, and some adults, representing 25.0% of those fully vaccinated and 21.8% of the total population.<sup>16</sup> The government has also indicated that COVID-19 vaccination will be part of routine immunization going forward.

**Table 2: Secured COVID-19 Vaccine Donations and Purchases and Estimated Costs (as of 28 December 2021)**

Source of financing	Committed vaccine doses (million)	Delivered Vaccine Doses (million)	Estimated cost per dose (\$ million) <sup>a</sup>	Estimated investment (\$ million)
Government of Cambodia	28.50	28.50	10.00	285.00
Australia (donation)	3.00	2.35	7.16	21.48
People's Republic of China (donation)	13.30	8.30	10.00	133.00
Japan (donation)	1.30	1.0	7.50	9.75
United Kingdom (donation)	0.41	0.41	7.50	3.08
COVAX (donation) <sup>b</sup>	6.70	2.92	7.50	50.25
<b>Total/Average</b>	<b>53.21</b>	<b>43.48</b>	<b>9.44</b>	<b>502.56</b>

COVAX = COVID-19 Vaccines Global Access, COVID-19 = coronavirus disease.

<sup>a</sup> Based on reported market prices for the vaccines financed or likely to be financed by each source.

<sup>b</sup> Includes dose-sharing contributions from Japan and the United States.

Source: Asian Development Bank.

10. **Financing needs.** The government has been successful in implementing the stage 1 and part of stage 2 of the vaccination plan primarily using its own resources and donations (Table 2). It plans to procure an additional 32.1 million vaccine doses to implement the remainder of stage 2 (Table 3), and hence the need for APVAX support is urgent and critical. The recent Delta and Omicron threats have accentuated the need further. The projected financing needs for 2022–2023 range from a low-cost scenario (\$6/dose) of \$192.6 million to a higher-cost scenario (\$10/dose) of \$321.00 million. The government has also requested that a portion of the loan proceeds be used to retroactively finance a portion of the vaccine procurement costs incurred under stage 1. The proposed combined total financing of the ADB and AIIB loans is \$145 million.

11. The deployment costs (cold chain, logistics, staff, training, and monitoring and evaluation) for stage 1, estimated at around \$20.6 million, were funded by the government's own resources (\$10.0 million) and contributions from the Government of Australia (\$5.8 million/A\$7.4 million), the World Bank (\$3.5 million), and COVID-19 Vaccines Global Access (COVAX) operational cost support (\$1.3 million).

12. Given the competitive vaccine market, the government is exploring various vaccine options for procurement of the additional doses. The government will procure primary vaccines for those not yet vaccinated and for booster doses.<sup>17</sup> For children below 5 years of age, it is tracking the ongoing clinical trials, anticipating authorizations in the first half of 2022. The proposed loans will enable Cambodia to secure the needed doses in a timely manner. In addition, the government is exploring procurement via COVAX cost-sharing, the United Nations Children's Fund (UNICEF), and bilateral deals (Table 3).

<sup>16</sup> Our World in Data. [Coronavirus \(COVID-19\) Vaccinations](#) (accessed 5 January 2022).

<sup>17</sup> Primary vaccines refer to those vaccine doses used to confer the initial protection. Depending on the vaccine, the primary vaccination may consist of two doses or a single dose.

**Table 3: Summary Timeline of Anticipated Procurement**

Vaccine use	Order date/Delivery date				
	Q2/Q3 2022	Q3/Q4 2022	Q4 2022/ Q1 2023	Q1/Q2 2023	Q2/Q3 2023
Vaccination doses for children under 5 <sup>a</sup>		4.4 million		4.4 million	
Booster doses <sup>b</sup>	5.0 million	5.0 million	5.0 million	5.0 million	3.3 million

Q = quarter.

<sup>a</sup> Vaccination for children below 5 assumes a two-dose regimen, with 4.4 million doses required to cover 2.2 million target population.

<sup>b</sup> Booster doses and/or second-generation vaccines to protect against new variants are assumed to be a one-dose regimen. It is also assumed that booster doses will be required on an annual basis.

Source: Government of Cambodia.

13. **Medical waste management plan.** The stage 1 COVID-19 vaccination campaign has generated about 200 tons of immunization waste, primarily sharps and safety boxes and used vials, cotton swabs, packaging, and personal protective equipment for vaccinators. Regulations and technical guidelines are in place to collect, store, treat, and dispose of medical waste, overseen by the Ministry of Environment and MOH. Safety boxes for sharps and vials are distributed together with the vaccines to referral hospitals, health centers, and mobile vaccination centers. Medical waste is either collected through a licensed service provider and processed at on-site medical waste treatment facilities or returned to the operational districts' referral hospitals for handling at designated treatment facilities.<sup>18</sup> There have been no reports of any major issues in medical waste management throughout stage 1 implementation. Stage 2 applies similar arrangements with appropriate updates to protocols as determined by the relevant authorities.

14. **Monitoring and evaluation.** Tracking vaccination at the individual level is managed through a mobile-based registration platform and a backup manual system. Vaccine logistics reports from district, provincial, and central levels are generated daily through the Vaccine and Logistics Management Information System. The MOH produces daily, weekly, and monthly reports on the following indicators: (i) number and percentage of people vaccinated with one and two doses, and (ii) drop-out rate between doses. These indicators are disaggregated by sex, geography, and some target population groups including health workers and the elderly. An external post-introduction evaluation of the stage 1 COVID-19 vaccine roll-out is planned for mid-2022. It will focus on pre-introduction planning, vaccine storage and wastage management, logistics and service delivery, and community receptiveness to the vaccines.<sup>19</sup> To manage adverse events following immunization, the government has established national and provincial investigation teams and monitoring systems. WHO and UNICEF reports indicate that adverse effects following vaccination have been minor and within the expected rates (footnote 15).

15. **Needs assessment.** The National Immunization Program (NIP) was rated as one of the MOH's highest performing programs in 2017, regularly achieving coverage of routine antigens of 82%–98% for an annual birth cohort of approximately 366,000.<sup>20</sup> Routine immunization coverage is equitable in terms of gender and geography, with hard-to-access groups reached via tailored strategies to address access barriers.<sup>21</sup> Cambodia's vaccination plan was informed by the COVID-19 Vaccine Introduction Readiness Assessment Tool developed by the World Health Organization (WHO), which ADB has certified as meeting APVAX access criterion 2 (Table 1). The regulatory system for vaccine approval, import, and utilization is in place, and the MOH has issued

<sup>18</sup> Due Diligence of Cambodia's Healthcare Waste Management System (accessible from the list of linked documents in Appendix 2).

<sup>19</sup> WHO. 2010. *New Vaccine Post-Introduction Evaluation (PIE) Tool*. Geneva.

<sup>20</sup> Gavi, The Vaccine Alliance. [Gavi Alliance Programs and Impact: Cambodia](#) (accessed 5 January 2022).

<sup>21</sup> Government of Cambodia, MOH, National Maternal and Child Health Center, and National Immunization Program. 2016. [Cambodia National Immunization Program Strategic Plan 2016–2020](#). Phnom Penh.

emergency use authorization for five vaccines as of November 2021.<sup>22</sup> The rollout delivery strategy is largely facility based, with vaccination being provided at national, provincial, and operational district hospitals, selected health centers, and mobile clinics. ADB technical assistance (TA) will support further analysis of stage 1 vaccination results to identify any access issues and propose improvements for stage 2.<sup>23</sup> UNICEF recently supported MOH with ultra-cold chain equipment, enabling storage of mRNA vaccines such as Pfizer and Moderna.

16. **Development partner coordination.** ADB participates in the Health Partners Working Group, chaired by WHO, which is the main health sector coordination mechanism in Cambodia. ADB has played a leading role in convening the development partners supporting the vaccination plan (ADB; AIIB; the Government of Australia; Gavi/COVAX, the Vaccine Alliance; UNICEF; and WHO) to ensure a coordinated approach. ADB has convened meetings on (i) the costing of the vaccination plan, (ii) monitoring and evaluation of vaccination rollout, and (iii) supporting translation of updates to the vaccination plan.

## B. Project Description

17. **Impact and outcome.** The project is aligned with the following impacts: (i) severity of the pandemic reduced, lives saved, and social disruptions minimized;<sup>24</sup> and (ii) negative health, social, and economic effects of the COVID-19 pandemic mitigated.<sup>25</sup> The project will have the following outcome: about 10.12 million people in target populations vaccinated or boosted against COVID-19.<sup>26</sup>

18. **Output: COVID-19 vaccines deployed.** The project will support the procurement of an estimated 14.5 million doses of safe and effective COVID-19 vaccines via the APVAX rapid response component (RRC) and the AIIB loan. It will contribute to the government's goal of strengthening population immunity by providing booster doses and primary vaccination to children below 5. The project will also help to develop and disseminate social and gender-inclusive guidelines to ensure equitable coverage of COVID-19 vaccination (para. 37).<sup>27</sup>

## C. Value Added by ADB

19. Since 2005, ADB has supported the MOH on regional communicable disease control projects.<sup>28</sup> The Greater Mekong Subregion Health Security Project has contributed to Cambodia's response to emerging disease threats and COVID-19 through support for (i) building subnational capacity for laboratory services and hospital infection prevention and control; (ii) strengthening surveillance, (iii) enhancing cross-border information exchange; and (iv) improving medical waste management treatment systems to treat waste from the COVID-19 vaccination rollout in more than 50 referral hospitals. ADB approved additional financing for this project in October 2021 (\$25 million loan and \$5 million grant) to scale-up Cambodia's health system amid a surge in new

<sup>22</sup> Vaccine Needs Assessment (accessible from the list of linked documents in Appendix 2). The approved vaccines are AstraZeneca, Serum Institute of India's Covishield/AZD1222, Sinopharm BBIBP-CorV, Sinovac Coronavac, and CoviVac (also known as Sputnik).

<sup>23</sup> ADB. 2021. [Supporting Enhanced COVID-19 Vaccination and Post-COVID-19 Health Security Response in Southeast Asia](#). Manila.

<sup>24</sup> Government of Cambodia, MOH. 2021. *National Deployment and Vaccination Plan for COVID-19 Vaccines*. Phnom Penh.

<sup>25</sup> ADB. 2020. [ADB's Support to Enhance COVID-19 Vaccine Access](#). Manila.

<sup>26</sup> The design and monitoring framework is in [Appendix 1](#).

<sup>27</sup> ADB. 2019. [Technical Assistance for Support for Human and Social Development in Southeast Asia](#). Manila.

<sup>28</sup> ADB. 2005. [Greater Mekong Subregion Regional Communicable Diseases Control Project](#). Manila; and ADB. 2019. [Second Greater Mekong Subregion Regional Communicable Diseases Control Project](#). Manila.

COVID-19 infections and sustained community transmission.<sup>29</sup> Under its COVID-19 Active Response and Expenditure Support (CARES) Program (a \$250 million countercyclical support program for Cambodia), ADB is also helping the government mitigate the severe health, social, and economic impacts of COVID-19.<sup>30</sup> ADB-financed TA that complements the CARES Program provided 1,668,000 units of personal protective equipment.<sup>31</sup>

20. ADB will provide \$1 million in TA to support stage 2 of the vaccination plan, including: (i) implementation support to MOH on financial management and procurement, (ii) support the post-introduction evaluation, (iii) improving logistics and supply chain management (footnote 23), and (iv) ensuring gender and social inclusion (footnote 27). The post-introduction evaluation will assess effectiveness of logistics and supply management and make recommendations to improve such systems. The TA will used to support recommendations from the evaluation.

#### **Box 2: Key Features of the Cambodia Rapid Immunization Response Project**

1. Building on the government's successful rollout of stage 1 of the vaccination plan, enable Cambodia to expand vaccination beyond the current 80% coverage and maintain population immunity against variants such as Delta and Omicron via booster doses.
2. Together with key development partners, support the post-introduction evaluation of the COVID-19 vaccination campaign, ensuring lessons learned on vaccine storage and wastage, logistics and service delivery, and community receptiveness are incorporated into routine immunization improvement plans, which will cover annual COVID-19 vaccinations.
3. Develop an online module on self-care, mental health, and stress management to support healthcare workers at the frontlines of COVID-19 response and vaccination.

COVID-19 = coronavirus disease.  
Source: Asian Development Bank.

#### **D. Summary Cost Estimates and Financing Plan**

21. The project is estimated to cost \$153.50 million (Table 4). Detailed cost estimates by expenditure category and by financier are included in the project administration manual.<sup>32</sup>

**Table 4: Summary Cost Estimates**  
(\$ million)

Item	Amount <sup>a</sup>
<b>A. Base cost<sup>b</sup></b>	
Output: COVID-19 vaccines deployed	146.75
<b>B. Contingencies<sup>c</sup></b>	5.00
<b>C. Financing charges during implementation<sup>d</sup></b>	1.75
<b>Total (A+B+C)</b>	<b>153.50</b>

COVID-19 = coronavirus disease.

<sup>a</sup> The project operational costs are inclusive of taxes and duties of \$0.72 million to be financed by the government. Such amount does not represent an excessive share of the project cost. The government will also provide tax exemption for the procurement of COVID-19 vaccines. The estimated tax on vaccines is not included in the project cost.

<sup>b</sup> In November 2021 prices.

<sup>c</sup> Includes physical and price contingencies, and a provision for exchange rate fluctuation.

<sup>29</sup> ADB. 2020. [Greater Mekong Subregion Health Security Project](#). Manila; and ADB. 2021. [Greater Mekong Subregion Health Security Project \(Additional Financing\)](#). Manila.

<sup>30</sup> ADB. 2020. [COVID-19 Active Response and Expenditure Support Program](#). Manila.

<sup>31</sup> ADB. 2020. [Technical Assistance for Support to Address the Outbreak of Coronavirus Disease 2019 and Potential Outbreaks of Other Communicable Diseases](#). Manila; ADB. 2018. [Technical Assistance for Strengthening Regional Health Cooperation in the Greater Mekong Subregion](#). Manila; and ADB. 2019. [Technical Assistance for Support for Human and Social Development in Southeast Asia](#). Manila.

<sup>32</sup> Project Administration Manual (accessible from the list of linked documents in Appendix 2).

<sup>d</sup> Includes interest and other charges on all sources of financing and will be financed by the government.  
Source: Asian Development Bank.

22. The summary financing plan is in Table 5. ADB will finance the expenditures in relation to the procurement and deployment of COVID-19 vaccines in accordance with APVAX eligibility criteria. It will be guided by the Indicative Master List of Eligible Items and Agreed List of Acceptable Expenditure Items ('Positive List') for ADB Financing under the Rapid Response Component (footnote 1). The government has requested a concessional loan of \$95 million from ADB's ordinary capital resources under the APVAX RRC and a loan of \$50 million under the Crisis Recovery Facility of the AIIB. The loan from ADB will have a 24-year term including a grace period of 8 years and an interest rate of 1.0% during the grace period and 1.5% thereafter. There is no commitment charge under the loan.

23. The AIIB loan will be partially administered by ADB, and it will jointly finance procurement of vaccines and logistics that meet the eligibility criteria of APVAX. The terms and conditions of the AIIB loan will be described in the loan agreement between the AIIB and the government. Approval of the AIIB loan is expected after the approval of the ADB loan. Prior to the effectiveness of the AIIB loan, the government may request disbursements from the ADB loan proceeds.

24. The government will contribute \$8.50 million of the total project cost to cover personnel, communication, capacity building, personal protective equipment, vaccine transportation, storage, waste disposal, surveillance, taxes and duties, and financing costs.

**Table 5: Summary Financing Plan**

<b>Source</b>	<b>Amount (\$ million)</b>	<b>Share of Total (%)</b>
Asian Development Bank		
Ordinary capital resources (concessional APVAX RRC loan)	95.00	61.89
Asian Infrastructure Investment Bank (loan)	50.00	32.57
Government of Cambodia	8.50	5.54
<b>Total</b>	<b>153.50</b>	<b>100.00</b>

APVAX = Asia Pacific Vaccine Access Facility, RRC = rapid response component.  
Source: Asian Development Bank.

25. Financial assistance from ADB and development partners, on highly concessional terms, represented only 5.7% of outstanding public debt during 2020 and would not cause Cambodia's debt sustainability to deteriorate in the medium term. The proposed ADB and AIIB loans will raise the public debt–GDP ratio marginally above the baseline scenario, to 40.0% by 2025. Fiscal deficits widened to 6.4% in 2021; however, with economic recovery and fiscal consolidation, the budget deficit is expected to decline to 4.3% during 2022–2025, containing debt–GDP ratio to around 40% over the medium term. ADB's debt sustainability analysis concluded that even with the additional loans under the project, the public debt–GDP ratio will remain sustainable.

## **E. Implementation Arrangements**

26. The MOH will be the executing agency. The NIP, Central Medical Store, nine national hospitals, and 25 provincial health departments will be the implementing agencies. The state secretary of the MOH will be the project director. Individual consultants for the implementation of the stage 2 of the vaccination program will be engaged under TA to support MOH (para. 20).

27. Procurement will be undertaken with simplified and expedient procedures permitted under the ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time), including procurement through bilateral

contracts, the COVAX Facility, and/or UNICEF. ADB member country procurement eligibility restrictions will be waived, and universal procurement will apply in line with the APVAX policy (footnote 25). Most of the procurement will be cofinanced with the AIIB. Some procurement may be financed exclusively by ADB prior to AIIB loan effectiveness. ADB will be the lead financier and its procurement policy will apply to all procurement.

28. The above procurement strategy achieves value for money for the government through (i) selecting candidate vaccine types that are best suited to the domestic logistics supply chain and distribution mechanisms; (ii) identifying vaccines that will efficiently meet the project disbursement conditions, and (iii) entering into agreements on terms and conditions that are reasonable, noting the currently constrained market for vaccines globally.<sup>33</sup>

29. Implementation arrangements are summarized in Table 6 and described in detail in the project administration manual (footnote 32).

**Table 6: Implementation Arrangements**

<b>Aspects</b>	<b>Arrangements</b>
Implementation period	March 2022–June 2024
Estimated completion date	30 June 2024
Estimated loan closing date	31 December 2024
<b>Management</b>	
Oversight body	Ministry of Economy and Finance
Executing agency	Ministry of Health
Key implementing agencies	NIP, Central Medical Store, nine national hospitals, and 25 provincial health departments
Implementation unit	NIP supported by a national procurement consultant and national finance consultant
Procurement	Multiple contracts for eligible vaccines through direct contracting (bilateral arrangement, COVAX and/or UNICEF). Multiple contracts for international transportation and logistics support through direct contracting.
Retroactive financing	Retroactive and/or advance financing may be undertaken. Retroactive financing (not exceeding 30% of the ADB loan amount) of eligible expenditures incurred after the declaration of the COVID-19 emergency but not earlier than 12 months before the date of the ADB loan agreement may be availed, subject to the combined outstanding balance of advance financing and the percentage approved for retroactive financing not exceeding 60% of the ADB loan amount. AIIB may provide retroactive financing up to 30% of the AIIB loan.
Disbursement	The proceeds of the ADB and AIIB loans will be disbursed following ADB's <i>Loan Disbursement Handbook</i> (2017, as amended from time to time) and detailed arrangements agreed between the government, AIIB, and ADB.

ADB = Asian Development Bank, AIIB = Asian Infrastructure Investment Bank, COVAX = COVID-19 Vaccines Global Access, NIP = National Immunization Program, UNICEF = United Nations Children’s Fund.  
Source: ADB.

**III. DUE DILIGENCE**

**A. Economic Viability**

30. The COVID-19 pandemic is both a health and an economic crisis, resulting in loss of lives and major economic downturn. The introduction of containment measures has restricted economic activities and caused a wide-spread economic slowdown in investment and international trade. In Cambodia, the economic impacts have primarily stemmed from impacts on the garments, footwear, textiles, and tourism industries (para. 5), and quarantine measures and lockdowns. Strengthening population immunity by vaccinating Cambodians under the age of 5

<sup>33</sup> Strategic Procurement Plan (accessible from the list of linked documents in Appendix 2).



and maintenance of immunity via booster doses will support the resumption of economic activities including production, investment, trade, and tourism. Project financial viability assessment was not undertaken since the project output is not designed to recover costs or produce direct revenue.

## **B. Sustainability**

31. The government used its own financing for vaccine purchases and operational costs for stage 1 and the initial phase of stage 2 of the vaccination plan. ADB's TA (footnote 23) will provide recommendations on financing for COVID-19 vaccination as part of routine immunization, in continued coordination with other development partners.<sup>34</sup>

## **C. Governance**

32. **Financial management.** A financial management assessment was conducted in March 2021 and updated in August 2021. It concluded that the overall pre-mitigation financial management risk for the MOH is substantial because of (i) its stretched capacity; (ii) limited automation of inventory management processes; (iii) lack of costing and expenditure data for stage 1 of the vaccination plan that could inhibit financial planning for future vaccine delivery; and (iv) high data security risk due to lack of clarity and detail on the rollout of the e-registration system, upgrades of existing monitoring systems, and how the system and upgrades were developed and deployed.<sup>35</sup> ADB's TA will help to mitigate these risks (footnote 23).

33. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and the MOH. The specific policy requirements and supplementary measures are described in the project administration manual (footnote 32). At the national level, the Anticorruption Council and Anticorruption Unit exist, but incomplete supporting legislation and a weak judiciary reduce their impact. Corruption risk for the project is assessed as medium. Project corruption risk will be mitigated through government oversight bodies, development partner coordination, and enhanced internal controls for procurement and financial management.

34. **Procurement.** Vaccines to be procured with ADB and AIIB loan proceeds are subject to APVAX vaccine eligibility criteria. ADB and AIIB will review any bilaterally negotiated agreements to ensure inclusion of ADB's anticorruption provisions.<sup>36</sup> AIIB will, in parallel, review against its Policy on Prohibited Practices. The government may also use the proceeds of the ADB and AIIB loans to cover the costs of transporting the vaccines from the place of manufacture to Cambodia, through the vaccine procurement contract or a separate logistics service provider.

35. The MOH is the procuring entity for the project. The MOH's overall procurement capacity is *moderate*, and procurement risk is assessed as *high*. The MOH has good experience in vaccination program planning and delivery, and some prior procurement experience using ADB's procurement policies and regulations. However, MOH staff resources are under pressure during the COVID-19 pandemic. The project is large and complex and will require ADB support on procurement-related risks, review of contracts, assistance with price validation, and support for negotiations as required for procurement via bilateral contracts, COVAX, and UNICEF.

---

<sup>34</sup> Development Partner Coordination (accessible from the list of linked documents in Appendix 2).

<sup>35</sup> Financial Management Assessment (accessible from the list of linked documents in Appendix 2).

<sup>36</sup> These include ADB's right to investigate suspected integrity violations and to audit and examine the records and accounts of contractors, suppliers, consultants, and other service providers.

## D. Poverty, Social, and Gender

36. **Key poverty and social issues.** The pandemic has affected the labor market, interrupted livelihoods and incomes, and disproportionately impacted the poor and marginalized groups. Migrant workers and their dependents have faced the burden of reduced household incomes and insufficient social protection coverage (para. 5). Poor and marginalized groups also remain vulnerable to impoverishment because of illness from COVID-19. The government's COVID-19 vaccination rollout will reduce the duration of these economic shocks, provided that vulnerable groups have equitable access to vaccination. The vaccination plan includes mobile clinics to vaccinate people in remote rural areas. Stage 2 includes specific targeted outreach to unvaccinated or partially vaccinated groups from stage 1.

37. **Gender.** The project is categorized *effective gender mainstreaming*. Frontline health workers, a majority of whom are women, have been exposed to extreme stress during the vaccination campaign. ADB's TA will help develop an online module on self-care, mental health, and stress management for healthcare workers (footnote 27). ADB's TA will help address access barriers that disproportionately impact women, especially pregnant, lactating, and disabled women (para. 6).<sup>37</sup> It will help the MOH develop, approve, and disseminate socially- and gender-inclusive guidelines to reduce access barriers and to improve the capacity of health care workers to meet the specific needs of women, girls, children, and hard-to-reach populations (footnote 27). The guidelines will complement the existing vaccination delivery protocols as Cambodia transitions to integrating COVID-19 vaccination into routine immunization. ADB will engage a gender and social inclusion specialist to support the implementation of the project's gender action plan, including (i) developing and delivering a train-the-trainer program on equitable and inclusive vaccination delivery to MOH staff involved in delivering COVID-19 vaccination (with women comprising at least 50% of the participants); (ii) delivering at least one annual training on equitable and inclusive vaccination delivery to at least 80% of key health personnel at the national level and implementing agencies, provincial health departments, and vaccination facilities; and (iii) providing online support on stress management for frontline health workers.

## E. Safeguards

38. In compliance with ADB's Safeguard Policy Statement (2009), the project's safeguard categories are as follows.<sup>38</sup>

39. **Environment (category C).** The administration of COVID-19 vaccines generates increased amounts of immunization waste. Medical waste management is stipulated in ministerial decrees and technical guidelines, and COVID-19 vaccination waste management requirements are outlined in the vaccination plan (footnote 14). Arrangements and current practices for the collection, transportation, treatment, and disposal of incremental medical waste were reviewed and confirmed to be generally acceptable (para. 13). The post-introduction evaluation (para. 14) will also assess medical waste management practices during stage 1 of COVID-19 vaccination.

40. **Involuntary resettlement (category C).** The project is classified C for involuntary resettlement impacts. It will not involve any land acquisition or involuntary resettlement. If land

---

<sup>37</sup> Marginalized groups, especially women, encountering barriers to COVID-19 vaccination, include communities residing on boats and/or far from the nearest referral hospital, migrant women, and women working in factories. For further details, see Vaccine Needs Assessment (accessible from the list of linked documents in Appendix 2).

<sup>38</sup> ADB. [Safeguards Categories](#).

acquisition impacts are identified during project implementation, mitigation plans will be prepared in accordance with ADB's Safeguard Policy Statement (2009).

41. **Indigenous peoples (category C).** The project is classified C for indigenous peoples impacts. The project is not expected to have any direct or indirect impacts on the dignity, human rights, livelihood systems, or culture of indigenous peoples, or on the territories or natural or cultural resources that indigenous peoples own, use, occupy, or claim as an ancestral domain or asset.

## F. Summary of Risk Assessment and Risk Management Plan

42. Significant risks and mitigating measures are summarized in Table 7 and described in detail in the risk assessment and risk management plan.<sup>39</sup>

**Table 7: Summary of Risks and Mitigating Measures**

<b>Risk Description</b>	<b>Mitigation Measures</b>
<b>Country-Level Risk</b>	
Inability to comply with PFM reporting requirements due to PFM system weaknesses including low budget credibility and limited budget information. <sup>a</sup>	The MEF will continue to implement the PFM Reform Plan, strengthening policy and regulatory frameworks for expenditure management, enhancing budgeting, and updating national financial reporting standards.
<b>Sector Risk</b>	
Strengthening population immunity is challenged by the emergence of new COVID-19 variants against which existing vaccines are less effective.	ADB will coordinate with COVAX, GAVI, UNICEF, and WHO to ensure the vaccines selected for booster doses are effective as possible against new variants.
Limited capacity of suppliers to meet global demand for vaccines for children below 5 leads to delays in vaccine delivery.	Continue proactive negotiations with multiple vaccine suppliers to mitigate supply risks.
<b>Project Risk</b>	
Accessibility barriers impacting the coverage of marginalized and hard-to-reach groups persist for booster doses.	Closely monitor rollout and analyze data on accessibility. ADB-funded technical assistance will support development and roll-out of alternative delivery strategies. <sup>b</sup>
High levels of vaccine inventory, a partially automated inventory management system, and capacity constraints at the subnational level increase risk that vaccines may be spoiled, lost, damaged, misplaced, or stolen.	Recommendations from the post-introduction evaluation of stage 1 of the vaccination campaign (para. 14) will be incorporated in revised policies and practices as part of routine immunization.
Lack of clarity in the new e-registration system and the existing monitoring and evaluation systems increases risks of data loss or corruption.	The MOH will stress test these systems. ADB and development partners will regularly assess and triangulate the quality of data in monitoring systems and support refresher trainings as appropriate.
Weak monitoring and evaluation constrain the ability to identify issues for prompt action and document results and lessons.	ADB to support the executing agency in strengthening its capacity to monitor and evaluate the vaccination plan. Ensure proper backup systems for digital platforms. ADB to work with development partners to support MOH's tracking of the vaccination plan, including the post-introduction evaluation (para. 14).

ADB = Asian Development Bank, COVAX = COVID-19 Vaccines Global Access, COVID-19 = coronavirus disease, GAVI = Gavi, the Vaccine Alliance, MEF = Ministry of Economy and Finance, MOH = Ministry of Health, PFM = public financial management, UNICEF = United Nations Children's Fund, WHO = World Health Organization.

<sup>a</sup> Financial Management Assessment (accessible from the list of linked documents in Appendix 2).

<sup>b</sup> ADB. 2021. [Supporting Enhanced COVID-19 Vaccination and Post-COVID-19 Health Security Response in Southeast Asia](#). Manila.

Source: ADB.

<sup>39</sup> Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

#### **IV. ASSURANCES AND CONDITIONS**

43. The government and the MOH have assured ADB that implementation of the project shall conform to all applicable ADB requirements, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, financial management, and disbursement as described in detail in the project administration manual and loan documents. The government has agreed with ADB on specific covenants for the project, which are set forth in the draft loan agreement.

44. No withdrawals shall be made from the loan accounts of ADB and AIIB for financing a contract to supply eligible vaccine(s) until: (i) ADB has received a letter from the government confirming (a) which COVID-19 vaccine(s) have been selected to be procured using the proceeds of the loans; (b) which of the APVAX vaccine eligibility criteria has been satisfied in respect of the COVID-19 vaccine(s) to be procured; and (c) that such COVID-19 vaccine(s) have received all necessary authorizations of the government, and have been authorized by the MOH and any other relevant regulatory authorities for distribution and administration within the territory of the country; and (ii) based on the information provided in the aforementioned letter, ADB has notified the government that the COVID-19 vaccine(s) to be procured are designated as eligible vaccines.

#### **V. RECOMMENDATION**

45. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan of \$95,000,000 to the Kingdom of Cambodia for the Cambodia Rapid Immunization Support Project under the Asia Pacific Vaccine Access Facility, from ADB's ordinary capital resources, in concessional terms, with an interest charge at the rate of 1.0% per year during the grace period and 1.5% per year thereafter; for a term of 24 years, including a grace period of 8 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan agreement presented to the Board.

Masatsugu Asakawa  
President

24 January 2022

## DESIGN AND MONITORING FRAMEWORK

<b>Impacts the Project is Aligned with</b>			
Severity of the pandemic reduced, lives saved, and social disruptions minimized (National Deployment and Vaccination Plan for COVID-19 Vaccines) <sup>a</sup> ; and negative health, social, and economic effects of the COVID-19 pandemic mitigated (ADB's Support to Enhance COVID-19 Vaccine Access) <sup>b</sup>			
<b>Results Chain</b>	<b>Performance Indicators</b>	<b>Data Sources and Reporting Mechanisms</b>	<b>Risks and Critical Assumptions</b>
<b>Outcome</b> Target populations vaccinated or boosted against COVID-19	<b>By 2024:</b> Additional 10.12 million <sup>c</sup> people in target populations vaccinated or boosted against COVID-19, disaggregated by sex (2022 baseline: 17 million people boosted and vaccinated) (OP 1.1)	MOH administrative data from weekly vaccination campaign reports	R: Existing vaccines ineffective against future COVID-19 variants  A: Inventory management system enables effective vaccine management to prevent vaccines from being lost, damaged, expired, or misappropriated.  A: Monitoring and evaluation of the vaccination plan are sufficiently robust to identify issues for prompt action and adequately document results (including sex-disaggregated data) and lessons learned.
<b>Output</b> 1. COVID-19 vaccines deployed	<b>By 2024:</b> 1a. About 14.5 million doses of COVID-19 vaccine delivered to Central Medical Store (2022 baseline: 43.84 million doses) (OP 1.1.2)  1b. Gender- and socially-inclusive guidelines <sup>d</sup> on the deployment and administration of COVID-19 booster vaccines in the context of routine immunization approved, budgeted, and implemented (2022 baseline: not applicable) (OP 2.2.2, OP 2.3.2)	1a. MOH administrative data, Central Medical Store VLMIS data  1b. MOH project reporting	R: Limited capacity of vaccine suppliers to meet global demand, including Cambodia's, leads to delays in delivery.  R: Insufficient financial resources are allocated to support operational costs for vaccine deployment.  A: Political, technical, institutional, and financial support is secured for the implementation of the guidelines.

<p><b>Key Activities with Milestones</b></p> <p><b>COVID-19 vaccines deployed</b></p> <p>1.1 Procure the required number of vaccine doses with ADB and AIIB financing (Q2 2022–Q4 2023)</p> <p>1.2 Provide TA for the post-introduction evaluation to document best practices, identify challenges, and provide recommendations to inform the transition of COVID-19 into routine immunization (Q2–Q3 2022)<sup>e</sup></p> <p>1.3 Recommend tailored messaging for under-vaccinated women and men and marginalized and hard-to-reach groups as part of the updated Communication and Community Engagement Strategy (or other equivalent communications activities) (Q4 2022–Q2 2023)<sup>f</sup></p> <p><b>Project Management Activities</b></p> <p>Conduct procurement value for money analysis and post-review sampling (Q2 2022–Q4 2023)</p> <p>Prepare and submit quarterly and annual progress reports (Q2 2022–Q4 2024)</p> <p>Submit annual audited project financial statements (Q2 2023–Q4 2024)</p> <p>Prepare project completion report (Q3–Q4 2024)</p> <p><b>Inputs</b></p> <p>ADB: \$95.0 million (APVAX RRC loan), \$1 million (TA)<sup>d, e</sup></p> <p>AIIB: \$50.0 million (loan)</p> <p>Government: \$8.50 million</p>
---

A = assumption, ADB = Asian Development Bank, AIIB = Asian Infrastructure Investment Bank, APVAX = Asia Pacific Vaccine Access Facility, COVID-19 = coronavirus disease, MOH = Ministry of Health, OP = operational priority, Q = quarter, R = risk, RRC = rapid response component, TA = technical assistance, VLMIS = Vaccine Logistics Management Information System.

<sup>a</sup> Government of Cambodia, MOH. 2021. *National Deployment and Vaccination Plan for COVID-19 Vaccines*. Phnom Penh.

<sup>b</sup> ADB. 2020. *ADB's Support to Enhance COVID-19 Vaccine Access*. Manila.

<sup>c</sup> About 14.5 million doses of COVID-19 vaccines will be procured under the project. The coverage of about 10.12 million people assumes two doses per person for retroactively financed doses (primary vaccination for adults), and one dose per person for booster shots, and for the primary vaccination of children below 5. The target of 14.5 million doses may cover retroactive financing of existing supply, if so, requested by the government.

<sup>d</sup> The guidelines will address the specific needs of women and girls, children, and marginalized and other hard-to-reach groups. The guidelines on COVID-19 booster shots will contribute to the development of the vaccination plan or similar policy on integrating COVID-19 vaccination into routine immunization. The guidelines will reflect lessons learned on barriers affecting vaccination uptake by women and other marginalized groups and provide operational recommendations to address the barriers and increase access. The training of trainers will further support the implementation of the guidelines for an equitable and inclusive vaccination deployment. The guidelines will be informed by the COVAX Guidance Note and Checklist for Tackling Gender-Related Barriers to Equitable COVID-19 Vaccine Deployment (March 2021). ADB. 2020. *Technical Assistance for Support for Human and Social Development in Southeast Asia*. Manila.

<sup>e</sup> ADB. 2021. *Supporting Enhanced COVID-19 Vaccination and Post-COVID-19 Health Security Response in Southeast Asia*. Manila.

**Contribution to Strategy 2030 Operational Priorities**

Expected values and methodological details for all OP indicators to which this operation will contribute results are detailed in Contribution to Strategy 2030 Operational Priorities (accessible from the list of linked documents in Appendix 2). In addition to the OP indicators tagged in the design and monitoring framework, this operation will contribute results for OP 7.3.3 Measures to improve regional public health and education services supported in implementation.

Source: Asian Development Bank.

**LIST OF LINKED DOCUMENTS**

<http://www.adb.org/Documents/RRPs/?id=55104-001-3>

1. Loan Agreement
2. Vaccine Needs Assessment
3. Project Administration Manual
4. Contribution to Strategy 2030 Operational Priorities
5. Development Partner Coordination
6. Country Economic Indicators
7. Debt Sustainability Analysis
8. Vaccination Plan: (i) National Deployment and Vaccination Plan for COVID-19 Vaccines; (ii) Master Plan for Covid-19 Vaccination Deployment; (iii) National Covid-19 Vaccination Deployment Strategic Plan Aiming at Creating Socio-Economic Resilience in Cambodia in 2021; (iv) Action Plan for Covid-19 Vaccinations for Children/Adolescents aged 12 to under 18; (v) Announcement on the Policy for Covid-19 Booster Dose; and (vi) Press release on the first and second doses vaccination (Sinovac) for 5-year-old children
9. Strategic Procurement Plan
10. Summary Poverty Reduction and Social Strategy
11. Gender Action Plan
12. Risk Assessment and Risk Management Plan
13. Indicative Master List of Eligible Items, and Agreed List of Acceptable Expenditure Items ('Positive List'), for ADB-Financing under the Rapid Response Component

**Supplementary Documents**

14. Eligibility Criteria for Use of Funds under the Rapid Response Component
15. Sector Assessment (Summary): Health
16. Financial Management Assessment
17. Due Diligence of Cambodia's Healthcare Waste Management System
18. Governor's Letter (Letter from the Deputy Prime Minister, Ministry of Economy and Finance)