

## Managing safe, equitable, and effective COVID-19 vaccination

24 February 2021, 15:00-16:30 (Manila Time), via Microsoft Teams

### I. Background and Context

1. The protracted spread of the coronavirus disease (COVID-19)<sup>1</sup> continues to severely affect health, social, and economic systems globally. Infections have reached more than 106 million worldwide, and taken more than 2.3 million lives.<sup>2</sup> The COVID-19 crisis has highlighted how closely public health and economic prosperity are intertwined. According to the Asian Development Outlook 2020 update,<sup>3</sup> economic growth in Southeast Asia remains under pressure as COVID-19 outbreaks and containment measures continue, particularly in Indonesia, Malaysia, and the Philippines. The region's growth forecast for 2020 was revised down to -4.4% in December 2020 from -3.8% in September 2020. Southeast Asia's growth outlook for 2021 is also downgraded, with growth expected at 5.2% in 2021, compared to the 5.5% forecast in September 2020.

2. As COVID-19 infections continue to soar in some countries and outbreaks reemerge elsewhere in Southeast Asia, economic revival will continue to be sluggish and influenced by developments in the global economy. Countries in Southeast Asia have implemented a range of public health measures on preparedness, prevention, control, detection, and response to contain the spread of COVID-19, but these crucial measures can also hamper economic performance. Given COVID-19's trajectory and its highly infectious nature,<sup>4</sup> safe and effective vaccines are needed to pave the way for governments and citizens to return to pre-COVID life. Efficient, effective, and inclusive vaccination programs can reduce virus transmission, save lives, and mitigate the economic damage of the pandemic by restoring confidence in people's ability to work, travel, and interact safely.

3. The scope and scale of vaccine development has proceeded rapidly, signaling a remarkable leap forward in the normal timescale for vaccine development.<sup>5</sup> As of 2 February 2021 there are 63 COVID-19 candidate vaccines in clinical evaluation, of which 16 are in phase three trials (requiring 30,000 or more participants), with another 173 candidate vaccines in preclinical evaluation.<sup>6</sup> Four COVID-19 vaccines<sup>7</sup> have submitted data to

<sup>1</sup> COVID-19 is the short term for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

<sup>2</sup> Data from the World Health Organization (WHO) as of 10 February 2021.

<sup>3</sup> Asian Development Bank. December 2020. *Asian Development Outlook Supplement*

<sup>4</sup> Geoffard, P-Y, and T Philipson (1996), "Disease Eradication: Private versus Public Vaccination", *American Economic Review* 87(1): 222-30.

<sup>5</sup> Matthias Helble and Susan Roth. Asia should lead the way in producing a novel coronavirus vaccine. ADB blog published on 23 April 2020 and accessed on 8 February 2021 from <https://blogs.adb.org/blog/asia-should-lead-way-producing-novel-coronavirus-vaccine>.

<sup>6</sup> WHO Draft landscape of COVID-19 vaccines accessed on 8 February 2021 from <https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines>.

<sup>7</sup> Pfizer-BioNTech, AstraZeneca, Moderna, and Gamaleya as of December 2020

regulatory authorities for emergency authority use, and the World Health Organization (WHO) is also on track in including vaccines in its Emergency Use Listing with 15 manufacturers undergoing assessment and prequalification.<sup>8</sup> Current vaccine production capacity constraints mean global demand for approved vaccines will far exceed supply for the foreseeable future.

4. With the arrival of COVID-19 vaccines, country efforts to address the impacts of the crisis are shifting gears towards vaccination roll out. High income countries are already vaccinating their populations, and have generally secured sufficient vaccines to protect their citizenry. Low- and middle-income countries are in various stages of negotiations, procurement, and some commenced inoculations in early 2021. On the whole, however, mass vaccinations in most Southeast Asian nations are not anticipated to be fully implemented until 2023. A summary of updated vaccine rollouts in Southeast Asia and the People's Republic of China (PRC) is provided in *Annex A*.

5. Cognizant of the different capacities of countries in vaccine development and distribution, global alliances and mechanisms have been put in place to ensure that no country is left behind, and to complement domestic efforts. One concrete example is the COVAX Facility<sup>9</sup> which has secured about 2 billion doses of global vaccine supplies through deals with numerous vaccine developers, with a target to start worldwide rollout in early- to mid-2021. However, significant challenges such as funding shortfalls, a limited supply of approved vaccines, delays in deployment, weak country capacities, and infrastructure and logistical bottlenecks present impediments to COVAX's goal of vaccinating the most vulnerable 20% of the population of participating countries.

6. International experience from similar outbreaks yields useful lessons on safe and effective delivery of COVID-19 vaccines including non-traditional immunization and logistics to reach the most vulnerable populations, robust advocacy and communications campaigns, transparent criteria with allocation processes for vaccine doses that are well understood by the population, and effective information management and distribution systems, among others. For vaccination strategies to be successful, other important factors include: (i) transport, storage and logistics infrastructure given that vaccines have very specific transportation and storage (e.g. cold storage) requirements; (ii) capacity of health facilities and sufficiency of medical personnel; (iii) prioritization of recipients based on strategic vaccination objectives; and (iv) community attitudes towards COVID-19 and the safety and efficacy of vaccines. Moreover, after deployment, all COVID-19 vaccines will need to be monitored<sup>10</sup> for safety and effectiveness.

<sup>8</sup> Status of COVID-19 Vaccines within WHO EUL/PQ evaluation process as of 20 January 2021 accessed on 8 February 2021 from [https://extranet.who.int/pgweb/sites/default/files/documents/Status\\_COVID\\_VAX\\_20Jan2021\\_v2.pdf](https://extranet.who.int/pgweb/sites/default/files/documents/Status_COVID_VAX_20Jan2021_v2.pdf)

<sup>9</sup> The Global Alliance for Vaccines and Immunizations (GAVI), a global health partnership of public and private sector organizations leading the COVID-19 Global Vaccine Access Facility (COVAX). COVAX operates as the vaccines pillar (pillar 3) of the Access to COVID-19 Tools (ACT) Accelerator which aims to fast-track development, production, and equitable access to COVID-19 tests, treatments, and vaccines. ACT-Accelerator coordinates with COVAX Facility since it serves as a global risk-sharing mechanism for pooled procurement and equitable distribution of eventual COVID-19 vaccines. COVAX is co-led by GAVI, the Coalition for Epidemic Preparedness Innovations, and the WHO and offers a partial solution given its aim is to vaccinate only 20% of the population. As of December 2020, a total of 92 low- and middle-income countries and economies will be able to access COVID-19 vaccines through GAVI's COVAX Advance Market Commitment (AMC) which will also cover at least part of the cost. Seven countries in Southeast Asia are eligible for the COVAX AMC namely: Cambodia, Indonesia, Philippines, Lao People's Democratic Republic, Myanmar, Timor-Leste and Viet Nam.

<sup>10</sup> Monitoring of adverse events following immunization (AEFI) is an essential strategy for ensuring the safety of vaccines. An AEFI is any untoward medical occurrence which follows immunization, and the adverse event may be any unfavorable or unintended sign, abnormal laboratory finding, symptom or disease but does not necessarily have a causal relationship with the usage of the vaccine. Countries are required to set up an AEFI surveillance system following global guidelines and standards.

## II. Thirteenth PACER Dialogue

7. Country readiness and capacities for COVID-19 vaccination varies considerably in Southeast Asia and the PRC. Each country also presents unique epidemiologic, demographic, infrastructure, and finance challenges. National strategies should incorporate specific activities to introduce COVID-19 vaccines in a manner that will reduce mortality, strengthen health system response, and build economic resilience. Health systems must adjust existing delivery strategies and information systems that have largely been focused on child immunization as they shift to adult vaccinations and significantly expanded coverage.

8. Because of the unprecedented speed required to roll out COVID-19 vaccines, countries must engage key stakeholders to plan scenarios, develop a national vaccine strategy, and organize operational aspects of vaccine introduction. It is vital for countries to strengthen and expand existing vaccination infrastructure. National vaccination strategies and policies should consider regulatory decision-making to increase acceptance and uptake of the vaccines. Countries also need comprehensive monitoring and evaluation systems to ensure efficient and effective implementation of vaccination programs.

9. There are also advantages in taking a regional approach in guiding national strategies as this can advance harmonization of standards, promote information exchange, and enhance equitable access. Global vaccine rollout requires coordinated action across wide-ranging systems—from manufacturing and storage, to shipping and distribution—and all of these require unprecedented international cooperation alongside strong private-public sector partnerships. Sustaining supply chains, open trade, and efficient trade facilitation will also ensure smoother flow of vaccines across borders to minimize delays, unnecessary costs, and wastage. Regional cooperation can also help accelerate the review of vaccines, build capacities by sharing lessons and experience, and promote common standards.

10. Development partners such as the Asian Development Bank (ADB) play a key role in facilitating a regional approach to addressing the COVID-19 outbreak. The Asia Pacific Vaccine Access Facility (APVAX) launched by ADB is hinged on minimizing cross-border outbreaks by providing a broad framework and resource envelope to support expanded vaccine access in ADB's developing member countries (DMCs). The US\$ 9 billion APVAX offers fast and equitable support to DMCs as they procure and deliver effective and safe COVID-19 vaccines. It has two components: (i) a Rapid Response Component which provides support for critical vaccine diagnostics and procurement, as well as transporting vaccines to DMCs; and (ii) a Project Investment Component that supports investments in systems for effective distribution and administration such as cold-chain storage facilities and domestic transport, including capacity building and surveillance.

11. ADB financing for vaccines is provided in close coordination with other development partners including WHO, GAVI, COVAX and bilateral and multilateral partners. ADB is also making available a US\$500 million Vaccine Import Facility under ADB's Trade and Supply Chain Finance Program to support the efforts of its DMCs to secure safe and effective vaccines, as well as the goods that support distribution and inoculation.

12. Countries in Southeast Asia and PRC are currently at different stages of developing strategies for the safe, effective, and systematic mass distribution of COVID-19 vaccine. COVID-19 vaccination programs need to consider different scenarios, phased approaches in prioritizing beneficiaries, current administration capacity, and innovative ways to deliver vaccines to target populations. Lessons learned, best practice examples, and

international cooperation models are available for governments to consider and adapt to their own approaches for large scale COVID-19 vaccine distribution and delivery.

13. In this context the ADB will convene the thirteenth **Policy Actions for COVID-19 Economic Recovery (PACER) Dialogue** in virtual format on 24 February 2021 (Wednesday) from 15:00–16:30 (Manila time) using Microsoft Teams. The title of the PACER Dialogue is **“Managing safe, equitable, and effective COVID-19 vaccination.”** The PACER Dialogues are organized under the ADB-supported BIMP-EAGA, IMT-GT, and GMS (B-I-G) Capacity Building Program, and explore measures that can help “B-I-G” member countries, Singapore, and Timor-Leste “bounce back better” from the COVID-19 pandemic.

### III. Objectives

14. The thirteenth PACER Dialogue will feature policy options for safe, efficient, effective, and equitable COVID-19 vaccination. The objectives are to:

- promote a better understanding of recent COVID-19 global vaccine development and access strategies available for developing countries;
- share knowledge, experience, and lessons on large scale COVID-19 vaccines distribution; and
- provide a platform for policy makers, development planners, and health practitioners to share knowledge and experience, and collaboratively learn from each other.

15. At the end of the dialogue, a Policy Brief will be produced to summarize the policy options and recommendations discussed.

### IV. PACER Dialogue Background Paper, Structure and Timing

16. The PACER Dialogues are envisaged to help decision makers broaden their perspectives, appreciate the wider implications of critical policy choices, and identify concrete policy actions. During the open discussions, participants are requested to provide inputs, share analysis, country experiences and lessons on COVID-19 vaccine distribution policies and strategies (even if preliminary) and in other vaccination programs used in similar pandemics.

17. A background paper will be circulated to all participants as advance reading. The indicative structure of the 1.5-hour (90 minute) PACER Dialogue is summarized in the attached program.

## Managing safe, equitable, and effective COVID-19 vaccination

24 February 2021, 15:00-16:30 (Manila Time), via Microsoft Teams

TIME	DETAILS
15:00-15:05	<p><b>Introductory Remarks and Publication Launch:</b> Policy Actions for COVID-19 Economic Recovery (PACER) <i>A Compendium of Policy Briefs</i> <b>13th PACER Dialogue – Overview and Objectives</b> <i>Moderator: Mr. Ramesh Subramaniam</i> <i>Director General, Southeast Asia Department (SERD), Asian Development Bank (ADB)</i></p> <p>Moderator to deliver introductory remarks to launch the PACER Compendium and provide 13th PACER Dialogue context, objectives, and structure.</p>
15:05-15:25	<p><b>Session 1: COVID-19 Vaccines: State of Play and Regional Approach</b> <i>Dr. Jerome Kim, Director General, International Vaccine Institute</i></p> <p>Presentation on the global situation and current updates of COVID-19 vaccines development, access, and distribution. Key actions for countries to ensure preparedness, prioritization, introduction, and delivery of COVID-19 vaccines. Highlight regional and international approaches to dealing with COVID-19 outbreaks.</p>
15:25-15:40	<p><b>Session 2: Supplying Safe and Effective COVID-19 Vaccines</b> <i>Mr. Teodoro B. Padilla, Executive Director, Pharmaceutical and Healthcare Association of the Philippines</i></p> <p>Presentation on fast-tracking development, innovations, and reliable supply of safe and effective COVID-19 vaccines. Given the complexity of global vaccine rollout the perspective of the pharmaceutical industry will be highlighted. Ensuring adequate regulation, sustainable supply chains, and efficient trade facilitation will be discussed based on strong private-public sector partnerships.</p>
15:40-15:50	<p><b>Session 3: Enhancing COVID-19 Vaccine Access and Delivery</b> <i>Dr. Eduardo P. Banzon, Principal Health Specialist, Human and Social Development Division, SERD, ADB</i></p> <p>Presentation on lessons, insights, and perspectives on enhancing large scale vaccine distribution amid COVID-19 based on the experience of ADB working with countries in Asia and the Pacific. The ADB launched Asia Pacific Vaccine Access Facility (APVAX) which promotes safe and effective vaccines to be accessed in a fair manner will be featured.</p>

TIME	DETAILS
15:50-16:25	<p><b>Open Discussion and Questions</b>  <i>Moderator: Mr. Ramesh Subramaniam</i></p> <p>PACER Dialogue participants exchange information on vaccine distribution policies and strategies in an open discussion format.</p> <p>To enrich the PACER dialogue discussions, the moderator will request country delegations to provide inputs and share analysis, country experiences, and early lessons on COVID-19 vaccine distribution policies and strategies (where relevant).</p>
16:25-16:30	<p><b>Synthesis and Summary</b>  <b>Closing Remarks</b>  <i>Mr. Ramesh Subramaniam, Director General, SERD, ADB</i></p> <p>Moderator summarizes the policy discussions, key recommendations, and closes the Dialogue.</p>

## Annex A: COVID-19 Vaccine Roll outs in Southeast Asia and the People's Republic of China

Country	COVID-19 Snapshot		COVID-19 Vaccine Roll outs Updates and Plans*
	Number of Cases	Number of Deaths	
Brunei Darussalam	131	3	<ul style="list-style-type: none"> <li>• joined global COVAX facility</li> <li>• expecting to have the COVID-19 vaccine in first quarter 2021</li> <li>• sourced enough supplies to cover 50% of population</li> <li>• discussions on-going with other suppliers</li> </ul>
	Source: data as of 8 February 2021 <a href="https://www.who.int/countries/brn/">https://www.who.int/countries/brn/</a>		
Cambodia	474	0	<ul style="list-style-type: none"> <li>• expected to import vaccines from PRC and Russian Federation</li> <li>• Australia offered financial support to aid vaccine coverage, in Southeast Asia including Cambodia</li> </ul>
	Source: data as of 8 February 2021 <a href="https://www.who.int/countries/khm/">https://www.who.int/countries/khm/</a>		
People's Republic of China*	101,316	4,831	<ul style="list-style-type: none"> <li>• four main producers from PRC – CanSino in Tianjin, CNBG in Wuhan, Sinovac in Beijing, and ZFLongkema in Anhui joined the COVAX facility</li> </ul>
	Source: data as of 8 February 2021 <a href="https://www.who.int/countries/chn/">https://www.who.int/countries/chn/</a>		
Indonesia	1,157,837	31,556	<ul style="list-style-type: none"> <li>• vaccinations to front line workers began in January 2021</li> <li>• discussions with PRC's Sinovac to provide supplies but difficulties with large population</li> <li>• Australia stated to provide financial support</li> </ul>
	Source: data as of 8 February 2021 <a href="https://www.who.int/countries/idn/">https://www.who.int/countries/idn/</a>		
Lao People's Democratic Republic	45	0	<ul style="list-style-type: none"> <li>• trials of the Russian Federation "Sputnik V" vaccine ongoing</li> <li>• in discussions with PRC on acquiring supplies</li> </ul>
	Source: data as of 8 February 2021 <a href="https://www.who.int/countries/lao/">https://www.who.int/countries/lao/</a>		
Malaysia	242,452	872	<ul style="list-style-type: none"> <li>• signed a deal with Pfizer for 12.8 million doses</li> <li>• vaccines free of charge to Malaysia nationals</li> <li>• plans to administer in two stages of 6.4 million people each, with the program to commence in first quarter 2021</li> </ul>
	Source: data as of 8 February 2021 <a href="https://www.who.int/countries/mys/">https://www.who.int/countries/mys/</a>		
Myanmar	141,304	3,175	<ul style="list-style-type: none"> <li>• seek assistance from the GAVI and COVAX to acquire vaccines</li> <li>• Australia providing financial relief</li> <li>• aims to treat 20% of the 'most at risk' in the population with vaccines</li> </ul>
	Source: data as of 8 February 2021 <a href="https://www.who.int/countries/mmr/">https://www.who.int/countries/mmr/</a>		

Country	COVID-19 Snapshot		COVID-19 Vaccine Roll outs Updates and Plans*
	Number of Cases	Number of Deaths	
Philippines	537,310	11,179	<ul style="list-style-type: none"> <li>aims to commence in June 2021 with target of about 25% of population</li> <li>more than 30 local companies signed an agreement to purchase at least 2.6 million vaccine doses from AstraZeneca</li> </ul>
	Source: data as of 8 February 2021 <a href="https://www.who.int/countries/ph/">https://www.who.int/countries/ph/</a>		
Singapore	59,699	29	<ul style="list-style-type: none"> <li>to produce own vaccine "Lunar" and joint venture with US company Arcturus and Duke-NUS medical school</li> <li>vaccines are expected to be available from first quarter 2021</li> <li>started vaccinations of frontline workers on 30 December 2020</li> </ul>
	Source: data as of 8 February 2021 <a href="https://www.who.int/countries/sgp/">https://www.who.int/countries/sgp/</a>		
Thailand	23,557	79	<ul style="list-style-type: none"> <li>expect vaccines to be delivered in mid-2021 that would cover 13 million people in a population of about 69 million</li> <li>National Vaccine Institute-Thailand signed contract worth \$79 million with AstraZeneca</li> </ul>
	Source: data as of 8 February 2021 <a href="https://www.who.int/countries/tha/">https://www.who.int/countries/tha/</a>		
Timor-Leste	80	0	<ul style="list-style-type: none"> <li>to receive assistance from GAVI Institute</li> </ul>
	Source: data as of 8 February 2021 <a href="https://www.who.int/countries/tls/">https://www.who.int/countries/tls/</a>		
Viet Nam	2,005	35	<ul style="list-style-type: none"> <li>signed an agreement with Medigen Vaccine made in Taipei, China to secure the supply of 3 million to 10 million doses in 2021</li> <li>produce its own vaccine, with the Institute of Vaccines and Medical Biologicals (IVAC) with Icahn School of Medicine New York and global health non-profit organization PATH</li> <li>phase 1 trials ongoing, phases 2 and 3 to be conducted beginning of 2021</li> </ul>
	Source: data as of 8 February 2021 <a href="https://www.who.int/countries/vnm/">https://www.who.int/countries/vnm/</a>		

CNBG=China National Biotec Group, COVAX=COVID-19 Global Vaccine Access Facility, COVID-19=SARS-CoV-2, GAVI=Global Alliance for Vaccines and Immunizations, IVAC= Institute of Vaccines and Medical Biologicals, PATH=Program for Appropriate Technology in Health, PRC=People's Republic of China, \$ refers to US dollars.

Sources\*: <https://www.aseanbriefing.com/news/covid-19-vaccine-roll-outs-in-asean-asia-live-updates-by-country/> accessed on 9 February 2021.

<https://www.china-briefing.com/news/chinas-covid-19-vaccine-development-and-availability/> Data as of 3 December 2020 and accessed on 9 February 2021.