Webinar Series Synthesis Report – Thursday, April 29, 2021

COVID-19 Vaccine Financing: A Domestic Resource Mobilization Perspective

The pandemic of the coronavirus disease 2019 (COVID-19) continues to take its toll in Asia and the Pacific as well as globally. In addition to its direct impact on morbidity and mortality, the pandemic has adversely affected economic activity due to lockdowns, voluntary social distancing, and cross-country spillovers. COVID-19 vaccines are a welcome 'light at the end of the tunnel', not only in terms of their role in preventing cases and deaths, but also as a mechanism for stimulating economies. Even though economic growth is currently expected to rebound to some extent in 2021, it will do so from a lower base and it may take a couple of years to return to pre-COVID levels of economic output and fiscal tightening will pose a challenge for public financing for several years to come. Reaching 70% of the population with COVID-19 – estimated for reaching some semblance of 'herd immunity' -- will represent a high fiscal burden for most low- and middle-income countries. Given constraints associated with financing and accessing vaccines, in the near term, many countries are pursuing more limited targeted vaccination strategies based on the 20% coverage supported by COVAX. Others are pursuing more expansive vaccination strategies following a portfolio approach with multiple vaccine sourcing strategies. Relying on a vaccine alone, however, would be a mistake, because non-pharmaceutical interventions --- testing, tracing, and isolating -- greatly magnify effectiveness and cost-effectiveness. The increasing emergence of new, more infectious variants, some of which appear to have greater immune resistance, creates a shared global interest in early allocation of vaccines to countries that have high levels of infection and hence are more likely to incubate new mutations.

Given this backdrop, the Joint Learning Collaborative and the Health Financing Global Solutions Group invite you to a roundtable discussion on issues and challenges related to vaccine financing and prioritization. The roundtable will focus on the following specific questions:

- How did you design your COVID-19 vaccines strategy? What were your main considerations in doing so? In particular, how are you prioritizing populations for COVID-19 vaccines and why? Where do you anticipate procuring/ accessing vaccines from?
- What are your estimates of costs for providing coverage, and what are the main cost drivers? How is your country/ does your country anticipate financing the vaccine coverage [external assistance, domestic health spending]? What challenges do you anticipate with planning and financing COVID-19 vaccine coverage?
- What challenges do you anticipate with implementing the COVID-19 vaccine roll-out? How does the COVID-19 vaccine roll-out affect your country’s national immunization program and access to other essential services?

The webinar is co-sponsored by the World Health Organisation, World Bank and Global Fund.
LESSONS AND KEY TAKEAWAYS

• **COVID-19** vaccines provide an opportunity to contain the pandemic induced mortality and morbidity.

• **COVID-19** vaccine financing will add to the pressures of already distressed domestic resources for health in several low and middle income countries.

• Inequitable distribution in the **COVID-19** vaccine administration in low and high income countries needs to be narrowed in the future.

• Massive re prioritisation of health in the government budgets would be required to maintain health spending at pre-**COVID-19** levels

• Heavy dependency on **COVAX** as a source of **COVID-19** vaccines and vaccination funding in low and middle income countries

• Limited funding sources for **COVID-19** vaccine financing as well overcoming vaccine hesitancy amongst health workers and general population were the biggest challenges in the countries

• In addition to a challenging environment, the **COVID-19** pandemic offers opportunities for redesigning policies for health system strengthening and financing health

• Continued community efforts towards achieving UHC as well as stressing on non-pharmaceutical interventions such as border restrictions, quarantine and isolation, distancing, and nudging behavioural changes

• The role of the development partners in supporting the low and middle income countries with the supply side readiness in the roll out of **COVID-19** vaccine is significant

Webinar recording can be accessed [here](#) | Background Materials can be accessed [here](#)
**Opening Remarks**
Dr. Aparnaa Somanathan, Practice Manager, World Bank

**Overview Presentations**
Mr. Tomáš Roubal, Health economist, World Health Organisation
Dr. Christoph Kurowski, Global Lead for Health Financing, World Bank

**Country Discussants**
**Mongolia**
Dr. Bayarsaikhan Dorjderem, Head of Finance department, Ministry of Health, Mongolia
Mr. Sukhdari Ugtakhbayar, Junior Financial specialist, Ministry of Health, Mongolia.

**Solomon Islands**
Dr. Divinal Ogaoga, Director of Reproductive and Child Health Division and National Expanded Immunization Program, Solomon Islands
Ms. Jenifer Anga, National Coordinator for the Expanded Program on Immunization, Ministry of Health and medical Services, Solomon Islands.

**Fiji**
Dr. Rachel Devi, Head of Family Health Unit, Ministry of Health and Medical Services/ COVID19 Vaccine Lead

**Lao PDR**
Mr. Suphab Panyakeo, Deputy Director General, Department of Finance, Ministry of Health.

**Closing Remarks**
Mr. Martin Taylor, Director of Health Systems and Services, World Health Organisation

**Moderator**
Dr. Peter Cowley, Coordinator Western Pacific, World Health Organisation
Dr. Aneesa Arur, Practice Leader for Human Development, World Bank
EVENT BACKGROUND

Labelled as a black swan event, the COVID-19 pandemic can inarguably be treated as a health and humanitarian crisis that has spared not a single country on the globe. In addition to its direct impact on morbidity and mortality, the pandemic has adversely affected economic activity due to lockdowns, voluntary social distancing, and cross-country spillovers. The COVID-19 has triggered a global economic contraction, the likes of which has not been seen by many countries since World War 2. In this context, COVID-19 vaccines are hailed as a resort to prevent COVID-19 related morbidity and mortality as well as a mechanism to promote economic recovery. However, it is critical to note that the COVID-19 vaccine financing will add to the pressures on the domestic resources available for health that have already been severely curtailed as a consequence of the economic loss of output and activity in several low and middle income countries during the COVID-19 years.

This webinar looked at COVID-19 vaccine financing from a domestic resource mobilisation perspective as well as the the macro fiscal impact and the implications for health and vaccine financing particularly in the East Asia Pacific context. Regional experts provided insights on their population prioritisation and budgetary strategies as well as challenges faced or anticipated in the implementation of the vaccine financing in a country specific context.

INTRODUCTION

The economic impact of the pandemic, likened to be more severe than the Great Depression and the Second World War has severe differential impact on countries in the East Asia Pacific region that are externally integrated through trade and tourism. The exponential increase in the death toll as well as the long term repercussions on economic activity make it imperative for a concerted global effort towards controlling the pandemic. In this context, COVID-19 vaccines present a promising opportunity of countering the global pandemic as well as a cost effective way towards the path of economic recovery. The current year has seen countries grappling with the dual burden of expanding vaccination coverage to attain herd immunity for their populations in a challenging environment of limited and dwindling fiscal resources for health on account of COVID-19. The annual fixed cost of COVID-19 vaccines that seems to be the reality for all countries going forward would add to the distressed health financial resources. In addition, several countries will face logistical and service delivery challenges in their national roll of COVID-19 vaccinations. The existence of robust immunisation systems in countries to ensure rapid scale up and expansion of COVID-19 vaccination coverage as well as make progress in curbing the COVID-19 variants cannot be discounted. It is imperative to accomplish this without crowding out the service provision and funding for essential non COVID-19 health services.
In this background, there is a tremendous opportunity for knowledge exchange to learn from country experiences on prioritising population given the limited supplies of vaccines and accessing these supplies. The budgetary aspects of vaccine financing and the contribution of domestic resourcing in funding COVID-19 vaccines is equally important. Cross learnings from country specific considerations in designing vaccination strategies and challenges they anticipate or are already confronting in implementing the C-19 vaccines are also very useful going forward.

**OVERVIEW OF COVID-19 VACCINES**

The webinar provided a landscaping overview of the COVID-19 and the vaccine roll out in the Asia Pacific region. In a snapshot, as per the latest estimates COVID-19 has impacted 150 million cases with more than 3 million deaths with India overtaking the rest of the world to be the infamous global leader for the maximum cases followed by a recent spikes in Turkey, America and Brazil. Nearly 1 billion vaccine doses have been administered until the end of April, 2021. There is a significant difference in the Americas, Africa and Europe and Middle Eastern regions that have experienced community transmission compared to Asia, Australia, New Zealand and China which are now experiencing small cluster of cases with a relatively low case load. Although the Asia Pacific region is not represented in the countries with high infection rate, the emerging clusters are a matter of concern demanding swift action.

As with the regional differences in the current rate of infections, the COVID-19 vaccine roll out also is the highest in Europe, US and Canada as compared to lower vaccines administered in African and Asian countries. It is important to recognize that vaccine administration is the last piece of the puzzle that begins with availability and registration of vaccines as well as ensuring its effectiveness before they are ready into enter the supply chain. The supply chain management that covers the entire trajectory of deployment to regional facilities and local distribution is of particular importance in the case of COVID-19 vaccines that demand a very detailed temperature control. Prioritising eligible populations given the scarcity of vaccines as well as overcoming the challenge of vaccine hesitancy is another dimension of the vaccine roll out that needs to be considered. The role of the development partners such as World Health Organisation, World Bank amongst others was also underlined in assisting with supply side readiness of vaccine provision in terms of a complex logistical and organisational health system as well overcoming the unprecedent challenges of vaccination that no country has encountered in the past.

By the end of April, 2021, 200 COVID-19 vaccine products were in the pipeline at different stages of development and clinical trials. The WHO had already approved the usage of 12 vaccines with the potential availability of few more such as the Chinese vaccines (Sinopharm and Sinovac) and Maderna in the coming months, hence improving the availability of vaccines and narrowing the supply gap globally given their large
scale production and capacity. The mRNA (Pfizer, BionTech, Moderna) and Whole Virus (Chinese, ICMR-Bharat) are the predominant types of vaccines in distribution with the Viral Vector (AstraZeneca, Sputnik V, Johnson & Johnson) slowly catching speed (Figure 1).

**Figure 1: Production of Vaccines by type**

<table>
<thead>
<tr>
<th>Production by type of vaccines</th>
<th>Source: ANIMA, PPHMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viral Vector</td>
<td>22%</td>
</tr>
<tr>
<td>mRNA</td>
<td>44%</td>
</tr>
<tr>
<td>Whole Virus</td>
<td>34%</td>
</tr>
<tr>
<td>Total</td>
<td>99.8%</td>
</tr>
</tbody>
</table>

The growing global inequities in the distribution of vaccines needs to be recognized and rectified in the coming future with a dramatic difference in the cumulative number of cases administered per hundred population in high income countries (37/100) as compared to low income countries (0.4/100) (Figure 2).

**Figure 2: Inequitable Distribution of COVID-19 Vaccines**

In the East Asia Pacific region, there are 12 vaccines approved for EU listing with close to 32 countries receiving around to 250 million doses. More than 3 types of doses were distributed by COVAX, a global initiative aimed at ensuring the equitable distribution of vaccines globally. National procurement is the main mechanism to source vaccines which is largely driven by the Chinese experience. Importantly, countries in
the Western Pacific region rely heavily on COVAX donations and other measures to access vaccines. The COVAX had already completed three rounds of donations till recently (Round 1- February-March, Round 2-March-April, Round 3- April-June, 2021). Whereas, the second round of COVAX donations amounted to 237 million doses sourced from Astrazeneca and Serum Institute of India, there has been a drastic fall in the third round to only 14 million doses primarily sourced from Pfizer distributed amongst 47 countries. Of these 3 million doses have been distributed to countries in the Western Pacific regions (Philippines – 68%, Lao PDR and Mongolia -3% each).

MACRO-FISCAL IMPACT OF COVID-19
The webinar also discussed at length the macro-fiscal impact of COVID-19, its consequences on health spending and underscored the criticality of progressing towards making inroads in economic recovery along with health recovery in the process. The components of health recovery are finding mechanisms of ending the pandemic of which COVID-19 vaccine constitutes an integral part while striving to maintain the progress made towards the achievement of UHC development goals that have been reversed due to the pandemic.

For the purpose of discussing the macro-fiscal impact of COVID-19, the countries were categorised into East Asia high income, East Asia middle income and the Pacific countries (EAP). The COVID-19 has triggered a global economic contraction, the likes of which has not been seen across many countries since World War 2. Latest estimates indicate per capita economic growth rates to decline on average by almost -7% globally, and between -4 to -8% across low- and lower-middle income countries. Despite an estimated recovery of 1.1% in 2021, the global economic contraction has had a dramatic impact on countries differentiated by their level of external integration and fiscal vulnerabilities. According to IMF forecasts, the COVID-19 can best be treated as an short term economic shock in middle and high income EAP countries with a fall in GDP growth for the COVID-19 year and a recovery to the pre-COVID-19 levels1 in the subsequent year. However, the pandemic is predicted to have a longer impact in the Pacific countries with an average drop of 8% in GDP with a recovery only in 2025 to the pre-COVID-19 levels indicating a deep long and painful recession (Figure 3).

1 Pre-covid level means the levels in 2019.
Loss in economic activity subsequently has a profound negative influence on the government revenues with the middle income EAP countries experiencing a massive drop of 15% on an average. There is a regional differential in the recovery time of government revenues to pre-COVID-19 levels with high and middle income countries taking close to 2-3 years to bounce back where as it is uncertain when the Pacific countries will recover to pre-pandemic levels.

Cumulatively, this has an impact on government spending on health that is determined by government revenues and the government’s capacity and willingness to borrow for health. In parallel to the trends in the contraction and recovery of economic growth by income categorisation in the EAP, growth in government spending (GGE) follows a similar pattern. As against EAP high income countries that invested heavily in fiscal stimulus of about 25% increase in GGE followed by shorter period of fiscal adjustment; the EAP middle income and Pacific countries responded by low levels of fiscal stimulus and a longer period of 5-6 years of fiscal contractions or reduced government spending. It is important to note that some of these countries were already experiencing periods of low government spending even before the pandemic struck and hence effectively have a prolonged period of low GGE (Figure 4).
Spending on health is largely driven by government spending, out of pocket expense and external financing. The discussion particularly provided insights into different scenarios of health spending by the government. The webinar essentially focussed on two aspects of prioritising health indicative of the level government spending that is influenced by the government’s capacity and willingness to spend. First scenario is when countries continue to prioritise health at the same level as pre-COVID-19 levels reflecting the government’s commitment towards health spending (by keeping government’s pre-pandemic spending share on health constant). Second scenario is capturing the intention of greater government spending factoring the additional cost associated with lockdown measures, social distancing vaccines, disease surveillance etc by keeping the per capita spending (GHE per capita) on health over the last decade constant. World Bank forecasts reveal a widening huge gap in the government ability and willingness to spend vis-a-vis government’s intention of keeping GHE constant. Attempts to narrow this gap involve a dramatic reprioritising of health in the fiscal budgets and by allocating a higher share directed towards the health sector. Although this seems daunting however past country experiences have demonstrated that it is achievable (Figure 5).

**Figure 5: Trends in Government Health Spending in the EAP Region**

**COUNTRY DISCUSSIONS**

Significantly, the webinar also provided opportunities of cross country learning and knowledge exchange of best practices from country specific experiences from Solomon Islands, Mongolia, Fiji and Lao PDR of expanding COVID-19 vaccine coverage across eligible priority populations, designing vaccine strategies, budgetary constraints and challenges they anticipate in the roll out of the COVID-19 vaccines in their countries. Below is a summary of country experiences on each of these different aspects of COVID-19 vaccine roll out in the these countries:

*Designing Vaccine Strategy*
In Solomon Islands a National Committee with representatives from the relevant ministries was responsible for endorsing a vaccine strategy design that was put together by a COVID-19 Technical Working Group constituting members from the Ministry of Health and development partners from WHO, World Bank and UNICEF. The strategy was largely inspired by past vaccination experiences in the country and adhered to the technical guidelines put forward by WHO Strategic Advisory Group of Experts on Immunization (SAGE). Limited supply of the COVID-19 vaccine as well as overcoming the logistical challenge of geographical isolation due to global lockdowns and flight restrictions were crucially considered in the vaccine strategy design. Additionally, financial resources needed for both the purchase and the deployment of the COVID-19 vaccines as well as capacity of the Ministry of Health including human resource management were also concerns that were factored in the design of the strategy.

Following a systems approach, a conglomerate of multiple committees representing the Ministry of Health, health human resources and IEC activities were in charge of designing the vaccine strategy in FIJI. The WHO guidelines were considered in drafting the vaccine strategy document with regards to assigning a regulatory authority, prioritising populations eligible for vaccinations, cold supply chain management and deployment of vaccines, preparing for adverse events following vaccination, raising resources to fund the vaccination, creation of digital platforms for smooth registration and vaccination and finally strengthening IEC activities to increase the uptake of COVID-19 vaccines.

The National Deployment and Vaccination Plan (NDVP) lays out the COVID-19 vaccination strategy in Lao PDR. It incorporates recommendations on vaccine deployment by prioritizing populations and delivery through fixed and mobile deliveries to effectively reach target populations. Since COVID-19 vaccine is new, the first phase of vaccine introduction is through fixed site delivery to effectively reach target populations. The mobile vaccination strategy is planned to reach target populations following the national guidelines.

**Prioritising Population Groups**

Across all countries, the high risk population groups compiled by the WHO guided them in prioritising the population for COVID-19 vaccines that was carried out in a phased manner. Unsurprisingly, the COVID-19 warriors or the frontline health workers, vulnerable elderly with co-morbidities, essential traveller and workers who are susceptible to the risk of infections were prioritised over all other population groups initially. The countries are ambitiously and rightly aiming at achieving 50-70% vaccination coverage to achieve

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2 Interagency Coordinating Committee who acted as technical advisors to the MHMS
3 National Coordinating Committee made up of divisional medical and nursing heads
4 Communications Steering Committee
to herd immunity, reducing mortality and morbidity related to COVID-19 and supporting the economic recovery (Table 1).

### Table 1: Snapshot summary of COVID-19 Vaccination Coverage in select countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Target Coverage (% of population)</th>
<th>Priority population</th>
<th>Types of Vaccine</th>
<th>Costs of Vaccination</th>
<th>Sources of Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solomon Islands</td>
<td>50%</td>
<td>WHO SAGE guidance:</td>
<td>• COVAX facility for 20% population</td>
<td>USD$ 905,267 for 50% population coverage</td>
<td>• COVAX Support for 20% population</td>
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<tr>
<td></td>
<td></td>
<td>• Front-liners, health workers,</td>
<td>• Vaccine support from China from donations of 50,000 doses of Sinopharm</td>
<td></td>
<td>• Bilateral country donations from Australian, New Zealand and SIG governments.</td>
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<tr>
<td></td>
<td></td>
<td>• Elder people above 55 age with co-morbidities,</td>
<td></td>
<td></td>
<td>• Financial support from Development Partners to purchase vaccines</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• people with compelling reasons to travel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mongolia</td>
<td>60%</td>
<td>Highest Risk Category:</td>
<td>A total of 509,740 doses of the vaccine came from India, China, Russia, Korea and COVAX:</td>
<td>50.7 million</td>
<td>Donations and $ 50.7 million soft loan from the World Bank.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Response Team</td>
<td></td>
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<td></td>
<td></td>
<td>• Continuous Operations,</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Trade and Service Sectors,</td>
<td></td>
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</tr>
<tr>
<td>Country</td>
<td>Target Coverage (% of population)</td>
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<tr>
<td>Lao PDR</td>
<td>• Phase 1 (22% coverage): Cumulative population vaccinated (in the first half of 2021): 3% of total population then expanded to the remaining target group</td>
<td>High risk groups: • Health care workers &amp; frontline staff • High risk elderly and persons with underlying health conditions because who are susceptible and have higher risk for severity and mortality after infection • Essential workers who are driving force for protecting economic loss, country stability and growth • Essential travelers who have potential risk from traveling</td>
<td>• AstraZeneca 164,000 doses • Sinopharm 300,000 doses • Sputnik V 20,000 doses • Pfizer 25,740 doses</td>
<td>Grand Total - $84.6 million • Phase 1 (22% Coverage): TC = $27.4 million • DC = $3.0 million • Phase 2 (50% Coverage): TC = $60.7 million • DC = $6.8 million • Phase 3 (70% Coverage): TC = $84.6 million • DC = $9.6 million</td>
<td>Vaccines committed by development partners: • COVAX: 20% of population or around 2.9 million doses • Sinopharm V: 1.1 million doses • Spunik V: 1,000 doses • Others: around 1.15 million doses + $1 million (procurement and deployment)</td>
</tr>
</tbody>
</table>

5 Total cost (TC) of vaccine deployment and Delivery cost (DC)
<table>
<thead>
<tr>
<th>Country</th>
<th>Target Coverage (% of population)</th>
<th>Priority population</th>
<th>Types of Vaccine</th>
<th>Costs of Vaccination</th>
<th>Sources of Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIJI</td>
<td>vaccinated around 5.14 million</td>
<td>• Other population and the remaining from phase I</td>
<td>For 56,000 individuals: 12,000 (Covax) 100,000 (Covishield) 24,000 (Covax-short shelf life) – for 24,000 individuals (started roll out again just this week).</td>
<td>• NDVP estimates for the four-tiered approach is FJD 22.85m • The main cost drivers are: • Unsubsidized vaccine cost: FJD 13.8m (after the initial COVAX 20% coverage) • Vaccine Impact Assessment: FJD 3.16m • National roll-out operational costs: FJD 3.14m • Subsidized vaccines to reach 20% initial coverage: FJD 1.38m</td>
<td>• The vaccines are anticipated to be financed from COVAX and bilateral development partners</td>
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</table>

**Types of COVID-19 Vaccines, Costs of Vaccination Coverage and Vaccine Financing**
COVID-19 Vaccines Global Access or popularly known as COVAX, is a worldwide initiative aimed at equitable access to COVID-19 vaccines directed by Gavi, the Vaccine Alliance, the Coalition for Epidemic Preparedness Innovations, and the World Health Organization. The COVAX was predominantly the single largest source of vaccines for the select countries. Apart from these bilateral agreements between countries were also other sources of procuring COVID-19 vaccines. India (AstraZeneca), China (Sinopharm) and Russia (Sputnik V) were the biggest players in the support for vaccines to these countries.

The main drivers of rolling of COVID-19 vaccines are vaccine procurement and vaccine delivery amplified due to the geographical constraints of the pandemic. Operational costs and costs associated with maintaining cod supply chain are also not insignificant across countries. Given the nature of the pandemic as well as scepticism surrounding the vaccines that were developed in a short period of time for a relatively unknown virus, countries also investing information and communication activities to nudge behavioural change to vaccine acceptancy as well are strengthening and capacity building of human health professionals for the service delivery.

As with the case of procurement of vaccines, countries have heavily relied on COVAX as well as external sources of financing such as support from development partners and bilateral government agreements rather than domestically raise resources to fund the COVID-19 vaccine roll out creating large funding gaps.

Challenges in the planning and financing of COVID-19 vaccines

Interestingly, countries shared different experiences in the challenges they face in the planning and financing phase of the COVID-19 vaccines. Insufficient funding resources to fund the COVID-19 vaccine rollout is a concern that was echoed by all countries.

Solomon Islands identified limited capacity of the Ministry of Health in multi-tasking different responsibilities associated with planning and the operational roll out of the vaccines. Adapting to changing and uncertain environment due to the pandemic to prevent derailing from the planned response was also mentioned as a component of the country preparedness.

Fiji recognized the vaccine dependency on COVAX as a source for unpredictability by receiving different varieties of vaccine supplies. Additionally, shortage of vaccines supplies due to re-routing of vaccines in countries with higher demand such as India and PNG that are experiencing a recent spurt in the infection spread was also cited as an issue.
In Lao PDR, the COVAX and development partner commitment of 5.3 million doses currently provides coverage to close to 36% of the population. In the absence of further commitments, the Lao government will need to explore the potential of alternative sources for financing vaccine procurement and deployment to reach the targeted coverage of 70% of the population.

**Challenges in the implementation of the COVID-19 Vaccine**

Overcoming vaccine hesitancy was an overarching problem with all the countries. Particularly, Solomon Islands noted the COVID-19 vaccine hesitancy amongst the health workers as a stumbling block as well as perpetuated as a reluctance on their part to advocate the importance of vaccinations to the general population. Shortage of health workers and the increasing demand of the COVID-19 vaccines impacted the service provision and delivery of essential health services including routine immunization schedules. Geographical isolation compounded the access and reach of vaccines to the rural population living in outlying islands. The politics and challenges of maintaining the governance mechanisms and structures during emergency situations was also cited as a challenge in the recent future.

Fiji discussed the logistical issue of delayed supplies from COVAX facility as well as the uncertain randomness of vaccination supplies. Significantly, they mentioned the credible role of the Ministry of Health through effective communication strategies and creation of vaccine demand in overcoming the hesitancy amongst health workers and general population. Another substantial effort by the Ministry has been in the recruitment of additional health staff to overcome human resources shortages in specific areas with increased demand such as logistics, AEFI\(^6\), communications and technology support. To avoid overburdening health workers with COVID-19 vaccine responsibilities, the Ministry laid clear guidelines about the separation of teams with different responsibilities. While normative and campaign services as well as administrative work was carried out with the support of NGO’s, development partners and military, the nurses were given the sole responsibility of vaccination.

Lao PDR reiterated the imperativeness of risk communication and information management for an effective vaccine rollout. Improving coverage of eligible priority populations and making the vaccines accessible in remote and rural areas while ensuring the timely delivery of the second dose was focused upon. Low reporting on the health management systems at the provincial and district level was discussed as a challenge.

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\(^{6}\) An Adverse event following immunization (AEFI) is any untoward medical occurrence which follows immunization and which does not necessarily have a causal relationship with the usage of the vaccine. The adverse event may be any unfavourable or unintended sign, abnormal laboratory finding, symptom or disease.
Lao PDR also underlined the impact of pressure from mitigating the community transmission and impacts of COVID-19 the government on human and financial resource towards COVID-19 preparedness and vaccine rollout as well as on the delivery of non-COVID-19 health services, accentuating problems of service delivery in hard to reach remote areas.

Mongolia mentioned reduced funding in hospitals as a consequence of a decrease in demand of health services by the population in addition to inadequate limited financial resources to fund the vaccination drive.

There was a consensual concern amongst all the country discussants with limited funding option available for the continuation of the COVID-19 vaccine implementation in the coming future. The countries also gave us insights on how they have or are planning to allocate COVID-19 health expenditures in their budgets. For instance, Lao PDR plans to use a government emergency or contingency fund instead of line item budgeting approach. Similarly, an emergency budget in Solomon Islands has been used for COVID-19 response in Solomon Islands. The government also created a new budget line specifically for Covid-19 and flow of funds from the government was put directly into this budget line. These funds were controlled by the incident management team following a modified approval process, consequently allowing for the quick and timely disbursement of funds during the pandemic. Additionally, the Ministry allowed for flexibility in the utilisation of unused funds from other line items for the purpose of COVID-19 response.

Countries also shared strategies of coping with the requirement of two doses of vaccine around supply uncertainties. For instance, Fiji recommended splitting the dosage into half to ensure that the targeted populations were fully immunized and minimising vaccine wastage. However, country specific cases such as case load, rate of infections etc need to factored before such strategic decisions are implemented in a country. In parallel, the WHO is also recommending different strategies focussed on single doses for few population groups versus two doses.

**CONCLUSION**

In the concluding remarks, the opportunities and the challenges of dealing with a pandemic of this global scale in a politically intense environment was underscored. Stress was also laid on the continuation of non-pharmaceutical interventions such as border restrictions, quarantine and isolation, distancing, and nudging behavioural changes in addition to COVID-19 vaccines as a measure to contain the pandemic. Globally, countries must look to accommodate the realities of the pandemic while designing their health policies focussed on health system strengthening and financing health. Finally, the webinar concluded with underlining the importance of continued community efforts towards the pursuit of achieving universal health coverage and limiting the scope of the economic and health system disruptions caused by the pandemic in reversing the gains made in the achievement of development goals in the last several decades.
Annex I: Webinar Presentations
Landscaping of COVID19 and vaccines

From production, and registration to distribution
29 April 2020

Globally, as of 2:08pm CEST, 28 April 2021, there have been 148,129,030 confirmed cases of COVID-19, including 3,124,965 deaths, reported to WHO. As of 27 April 2021, a total of 961,231,417 vaccine doses have been administered.
Global Situation Overview (as of 27 April 2021)

- Previous 24 hours:
  - 534,598 new confirmed cases.
  - 7,259 new deaths.

- Cumulative:
  - 147,377,159 confirmed cases.
  - 3,112,041 deaths.

Countries with the highest number of new cases in previous 24 hours

<table>
<thead>
<tr>
<th>Country</th>
<th>New Cases</th>
<th>Total Cases</th>
<th>New Deaths</th>
<th>Total Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>233,144</td>
<td>17,616,307</td>
<td>2,723</td>
<td>197,894</td>
</tr>
<tr>
<td>Turkey</td>
<td>18,553</td>
<td>4,629,969</td>
<td>247</td>
<td>38,356</td>
</tr>
<tr>
<td>United States of America</td>
<td>14,469</td>
<td>31,742,914</td>
<td>802</td>
<td>566,842</td>
</tr>
<tr>
<td>Brazil</td>
<td>13,142</td>
<td>14,346,787</td>
<td>1,305</td>
<td>390,797</td>
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<td>10,843</td>
<td>5,413,036</td>
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<td>102,184</td>
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<td>Iran (Islamic Republic of)</td>
<td>8,026</td>
<td>2,417,230</td>
<td>606</td>
<td>70,676</td>
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<td>Colombia</td>
<td>7,190</td>
<td>2,774,464</td>
<td>605</td>
<td>71,351</td>
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<td>Argentina</td>
<td>6,012</td>
<td>2,660,884</td>
<td>670</td>
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<td>Italy</td>
<td>5,157</td>
<td>3,982,074</td>
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<td>119,238</td>
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<td>Germany</td>
<td>3,907</td>
<td>3,295,325</td>
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<td>81,624</td>
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</table>

COVID19 vaccine roll out globally
From production, registration, planning, funding to distribution

Delivery of COVID-19 vaccines presents challenges unprecedented in scale, speed and specificities.

NDVPs and WHO/WBG Readiness Assessment: 10 Core Areas of Assessments
1. Planning & Coordination
2. Resources & Funding
3. Regulation
4. Prioritization, Targeting & Surveillance
5. Service Delivery
6. Training & Supervision
7. Monitoring & Evaluation
8. Cold Chain & Logistics
9. Safety Surveillance
10. Demand Generation & Communication

R&D Pipeline (14 April)

WHO EUListed

<table>
<thead>
<tr>
<th>Manufacturer/Developer</th>
<th>Vaccine Type</th>
<th>Common Name</th>
<th>Brand Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pfizer/BioNTech</td>
<td>mRNA</td>
<td>Comirnaty</td>
<td></td>
</tr>
<tr>
<td>AstraZeneca</td>
<td>Viral Vector</td>
<td>Covishield</td>
<td></td>
</tr>
<tr>
<td>Janssen</td>
<td>Viral Vector</td>
<td>Janssen</td>
<td></td>
</tr>
<tr>
<td>*Univ Oxford/AZ</td>
<td>Viral Vector</td>
<td>COVID-19 Vaccine (ChAdOx1-S)</td>
<td>*Vazzervax</td>
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</tbody>
</table>

*Same COVID-19 vaccine approved by EMA was WHO EUListed on 15 April with alternative manufacturing sites as follows: Cadila Healthcare (India), CP, Fosun Biopharma (China) and SK Biologics (Korea).

Under review

<table>
<thead>
<tr>
<th>Developer/Manufacturer</th>
<th>Timeline to Issue Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sinopharm/Beijing</td>
<td>End April 2021</td>
</tr>
<tr>
<td>Institute-</td>
<td></td>
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<tr>
<td>SinoVac</td>
<td>May 2021</td>
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<tr>
<td>Gamaleya</td>
<td>Under review. No data yet, to be confirmed</td>
</tr>
<tr>
<td>CanSino</td>
<td>Joint inspection with EMA in May or June</td>
</tr>
<tr>
<td>Moderna</td>
<td>End of April</td>
</tr>
<tr>
<td>Novavax</td>
<td>Under review No data yet.</td>
</tr>
</tbody>
</table>
Production by type of vaccines

Source: Affinity, IFPMA

Inequity is decreasing, but high income countries have administered 100x more doses per inhabitant than the lowest income countries

Cumulative COVID-19 doses administered per 100 population

Source: Our World in Data (Brower et al.), WHO Dashboard (other countries), source for income groups: World Bank. Using latest available values for each month.
WPRO COVID-19 Vaccine Access and Availability

Note: Except for Sinovac, manufacturers in China do not disclose the no. of doses supplied to CHN. Data as of 28. 4. 2021

COVAX Allocation Overview

<table>
<thead>
<tr>
<th>Country</th>
<th>Doses Allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>15%</td>
</tr>
<tr>
<td>Lee PDR</td>
<td>3%</td>
</tr>
<tr>
<td>Mongolia</td>
<td>3%</td>
</tr>
<tr>
<td>Philippines</td>
<td>68%</td>
</tr>
<tr>
<td>New Zealand (SFP)</td>
<td>3%</td>
</tr>
<tr>
<td>Republic of Korea (SFP/UNICEF)</td>
<td>9%</td>
</tr>
<tr>
<td>Total</td>
<td>Nearly 3.5 mil doses</td>
</tr>
</tbody>
</table>

Pfizer (3rd round) Doses for WPR Countries (April to June)
Health Financing in the Time of COVID-19
East Asia & Pacific

JLN Domestic Resource Mobilization Collaborative

COVID-19 Vaccine Financing: A Domestic Resource Mobilization Perspective

Outline

The COVID-19 crisis

- Macro-economic impact
- Health spending impact

- East Asia Middle Income Countries
- East Asia High Income Countries
- Pacific Countries
From double shock – health and economic – to double recovery

No economic recovery... without a health recovery

> End the pandemic  > Reclaim losses in UHC

COVID-19: MACRO-ECONOMIC IMPACT
COVID-19 has resulted in most countries in a deep recession

On average, GDP per capita growth dropped from 2.5% in 2019 to -4.7% in 2020 and is expected to increase to +1.1% in 2021.

East Asia High Income Countries:
- Drop: 6.1%
- Return to positive per capita growth: 2021
- Return to pre-COVID per capita GDP: 2022

East Asia Middle Income Countries
- Drop: 7.8%
- Return to positive per capita growth: 2021
- Return to pre-COVID per capita GDP: 2022

Pacific Countries:
- Drop: 8.8%
- Return to positive per capita growth: 2022
- Return to pre-COVID per capita GDP: 2025

Government revenues have fallen faster than economic output

On average, GGR per capita growth dropped from +0.7% pre-COVID to -8.4% in 2020 and is expected to increase to +0.5% in 2021.

East Asia High Income Countries:
- Drop: -3.6%
- Return to positive per capita GGR growth: 2021
- Return to pre-COVID per capita GGR level: 2022

East Asia Middle Income Countries:
- Drop: -15.1%
- Return to positive per capita GGR growth: 2021
- Return to pre-COVID per capita GGR level: 2023

Pacific Countries:
- Drop: -5.8% (negative pre-COVID)
- Return to positive per capita GGR growth: 2023*
- Return to pre-COVID per capita GGR level: ?
Growth in government spending is expected to fall behind pre-COVID trends

On average, GGE per capita growth stayed at approximately 6.0% in 2020, yet it is projected to drop to 1.8% in 2021 and -2.0% in 2022. Thereafter, it will stay below pre-COVID levels.

East Asia High Income Countries
2020: +2.9%
Period of fiscal adjustment: 2021 to 2023

East Asia Middle Income Countries
2020: -4.1% (2020)
Period of fiscal adjustment: 6 countries

Pacific Countries:
2020: -4.8%
Period of fiscal adjustment: 2022 and 2023

COVID-19 - HEALTH SPENDING IMPACT
Health expenditure components and their income elasticity

![Bar chart showing the share of total health financing in different regions: East Asia Middle Income, Pacific, East Asia High Income.]

- Income elasticity of government expenditure on health: 1.30
- Income elasticity of OOP: 0.88
- $1.5B Stagnant and?

Scenarios

1. Government decisions about per-capita health spending follow the same, procyclical behavior observed in the past.

2. Governments choose to hold the pre-pandemic share of health in government spending constant.

3. Governments protect the pre-pandemic trends in the growth of per capita government health spending.

4. Governments increase spending at the pre-pandemic growth rate, compensating also for lower OOP.
Scenario analysis – GHE per capita

Changes in prioritization of health to meet past spending trends
What is the path toward a double recovery?

VACCINE FINANCING: A DOMESTIC RESOURCE MOBILIZATION PERSPECTIVE

JLN COVID Vaccine Financing Event, April 2021

Dr Rachel Devi, Head of Family Health
Fiji

1) Protecting all Fijians from COVID19

2) Reduce Mortality & Morbidity related to COVID19

3) Supporting the Economical Recovery for Fiji

Objective of the COVID19 Vaccines
Background

- Fiji received its first batch of vaccines on the 6th of March from the COVAX Facility:

- To date we have received:
  - 12,000 (Covax)
  - 100,000 (Covishield)
  - 24,000 (Covax - short shelf life) – for 24,000 individuals (started roll out again just this week).
Question 1a: How did you design your COVID-19 vaccines strategy?

i) Systems Approach from any immunization program

ii) Guided template by the WHO & UNICEF with additions by MOHMS (Family Health Unit)

iii) Three main oversight committees:
   - Interagency Coordinating Committee who acted as technical advisors to the MHMS
   - National Coordinating Committee made up of divisional medical and nursing heads
   - Communications Steering Committee

Question 1b: What were your main considerations in doing so?

- Regulatory authority
- Target Population
- Cold Chain
- Deployment
- Adverse Events Following Immunization
- Digital Platform (Registration & Vaccination)
- Financing
- Communications etc.

Question 1c: How are you prioritizing populations for COVID-19 vaccines and why?

Phase 1: Front-line: all individuals in border control of the air and sea ports, health care workers, and their immediate family members.

Phase 2: Vulnerable individuals: all individuals with some sort of comorbid issues, such as diabetes, hypertension, cardiac, mental health illness, Cancer, Disability, Rheumatic Heart Diseases, etc., though not limited to these.

Phase 3: All individuals above 60 years of age, followed by all individuals above 18.

All individuals >18 years of age = ~650,000
(70% of Fiji Population)

Question 1d: Where do you anticipate procuring/accessing vaccines from?

i) Covax Facility

ii) Government to Government Initiative (E.g. India)

iii) Procurement – Manufacturers
Question 2a: What are your estimates of costs for providing coverage, and what are the main cost drivers?

- NDVP estimates for the four-tiered approach is FJD 22.85m
- The main cost drivers are:
  - Unsubsidized vaccine cost: FJD 13.8m (after the initial COVAX 20% coverage)
  - Vaccine Impact Assessment: FJD 3.16m
  - National roll-out operational costs: FJD 3.14m
  - Subsidized vaccines to reach 20% initial coverage: FJD 1.38m

Question 2b: How is your country/does your country anticipate financing the vaccine coverage [external assistance, domestic health spending]?

- The vaccines are anticipated to be financed from COVAX and bilateral development partners

Question 2c: What challenges do you anticipate with planning and financing COVID-19 vaccine coverage?

- Specific Distribution Plan of COVAX/
- Global supply issue
- Increase in cases in specific sites – for e.g India & PNG

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**Question 3a: What challenges do you anticipate with implementing the COVID-19 vaccine roll-out?**

**i) Vaccines trickling in slowing into the country:**
- affecting logistics issues on the ground
- A start and stop strategy.

**ii) Vaccines through the COVAX Facility delayed**
- To a certain level unavoidable due to the supply demand issues globally

**iii) Positive cases of COVID19 in Fiji**
- Strategy changes (suiting the situation)

**iv) Vaccine hesitancy**
- Overcoming this through communications materials and demand creation
Question 3b: How does the COVID-19 vaccine roll-out affect your country’s national immunization program and access to other essential services?

- Separation of teams doing normative and campaign services

- Human resource on the ground:
  i) More HR to my COVID19 vaccination team: (Specific teams for)
     a) Logistics
     b) AEFI
     c) Communications
     d) IT support
  ii) Involvement of Non-Government Organisations (Red Cross/MSP/RFHAF)

Vinaka Vakalevu- Thank you
How did you design your COVID-19 vaccines strategy?

The National Deployment and Vaccination Plan (NDVP) lays out the COVID-19 vaccination strategy in Lao PDR. There are strategies for COVID-19 vaccine deployment by prioritizing populations and by delivering through fixed and mobile deliveries to effectively reach target populations. Since COVID-19 vaccine is new, the first phase of vaccine introduction is through fixed site delivery to effectively reach target populations. The mobile vaccination strategy is planned to reach target populations following the national guidelines.

What were your main considerations in doing so? In particular, how are you prioritizing populations for COVID-19 vaccines and why?

The priority populations are high risk groups. Health care workers & frontline staff are the first priority.

1. High risk elderly and persons with underlying health conditions because who are susceptible and have higher risk for severity and mortality after infection.
2. Essential workers who are driving force for protecting economic loss, country stability and growth.
3. Essential travelers who have potential risk from traveling.
4. Other population and the remaining from phase 1.
Target coverage for COVID-19 vaccination

**Phase 1 (22% coverage):** Cumulative population vaccinated (In the first half of 2021): 3% of total population then expanded to the remaining target group;

**Phase 2 (50% coverage):** Cumulative targets around 3.67 million people;

**Phase 3 (70% coverage):** Cumulative population vaccinated around 5.14 million

---

Where do you anticipate procuring/accessing vaccines from?

- Currently, the country procure the vaccines via UNICEF from COVAX Facility i.e., AstraZeneca vaccine.
- Bilateral or direct procurement between governments are also conducted such as Sinopharm from China, and Sputnik v from Russia.
What are your estimates of costs for providing coverage, and what are the main cost drivers?

**Vaccine price = $7 per dose and 2 doses schedule**

**Phase 1 (22% Coverage):**
- Total cost (TC) of vaccine deployment = $27.4 million
- Delivery cost = $3.0 million

**Phase 2 (50% Coverage):**
- TC = $60.7 million
- DC = $6.8 million

**Phase 3 (70% Coverage):**
- TC = $84.6 million
- DC = $9.6 million

The main cost drivers include vaccine procurement and vaccine delivery.

---

**Current Funding Gap of Vaccine Deployment**

**Vaccines committed by development partners**
- **COVAX:** 20% of population or around 2.9 million doses
- **Sinopharm V:** 1.1 million doses
- **Spunik V:** 1,000 doses
- **Others:** around 1.15 million doses + $1 million (procurement and deployment)
How does your country anticipate financing the vaccine coverage?

• If entire vaccines for 22% of total population are subsidized by partners and COVAX AMC, the funding gap in 2021 is $4.8 million for delivery and operational costs.

• Vaccines currently committed by partners and COVAX AMC can partially cover 28% of total population in 2022. The funding gap in this year is around $18.5 million including delivery and operational costs.

• In 2023, 20% of total population will be vaccinated which aims to reach 70% coverage in this year. Thus, the funding gap in 2023 accounts for $23.9 million including $2.7 million for delivery and $0.7 million for operational costs.

Challenges on planning and financing COVID-19 vaccine coverage

• So far, around 5.3 million doses of COVID-19 vaccine are committed by partners and COVAX AMC (36% of total population). Thus, around 2 million doses remain in need to reach 50% coverage.

• To reach 70% coverage, if there is no more vaccine committed by partners or COVAX AMC, the GoL needs to find other sources for financing vaccine procurement, deployment and other activities.
What challenges do you anticipate with implementing the COVID-19 vaccine roll-out?

- Risk communication & information management are necessary for effective vaccine rollout
- Target groups are prioritized in vaccine rollout and vaccine reaches to those in remote and rural areas;
- Ensure timely delivery of 2nd dose, and reduce the vaccine wastage;
- The reporting rate on DHIS2 is low. Provinces and districts need close follow up DAILY reporting on DHIS2

How does the COVID-19 vaccine roll-out affect your country’s national immunization program and access to other essential services?

Due to covid-19 vaccine roll out, there are major constraints in human and financial resources to operate the routine immunization. This may delay the implementation of routine immunization activity at particularly subnational levels. Travelling restriction, limited of staff availability makes difficult to access to health services particularly for the poor in remote and rural areas.
Vaccine financing: A domestic resource mobilization perspective

JLN Covid vaccine financing event, April 2021

Dr Divinal Ogaoga, Director RMNCAH
Solomon Islands

Q1: How did you design your COVID-19 vaccines strategy? What were your main considerations in doing so? How are you prioritizing populations for COVID-19 vaccines and why? Where do you anticipate procuring/accessing vaccines from?

- The C19 vaccine strategy was designed by the C19 TWG. The TWG consists of partners from WHO and UNICEF who assisted with the strategy design. The strategy was designed based on the experience with the introduction of other new vaccines in Solomon, as well as on templates and technical guidance from WHO, that was contextualized to the Solomon Island situation.
- In designing the C19 vaccine strategy, the following were considered:
  - limited supply of the C19 vaccine
  - financial resources needed for both the purchase and the deployment of the C19 vaccines
  - capacity of the MHMS (including HR resources) to manage the implementation of the C19 vaccines
  - Logistics of access to vaccines given the global lockdowns and flight restrictions
- The population was prioritized based on the WHO SAGE guidance for prioritizing vaccine allocation in limited settings
  - Those includes, all frontliners, health workers, elder people above 55 age with co-morbidities, people with compelling reasons to travel
- Vaccines are anticipated from the COVAX facility, from Bilateral country donations, and financial support from Development Partners to purchase vaccines
Q2: What are your estimates of costs for providing coverage, and what are the main cost drivers? How is your country/does your country anticipate financing the vaccine coverage [external assistance, domestic health spending]? What challenges do you anticipate with planning and financing COVID-19 vaccine coverage?

- According to the NDVP, the estimated cost for the coverage of the first 50% of the eligible population is USD$905,267.
- The main cost drivers are:
  - Costs of roll-out of the COVID-19 vaccine across the country: transportation (sea, air, road), allowances, per diems, accommodation, training, awareness campaigns, data recording and monitoring.
- The vaccines are anticipated to be financed from COVAX and development partners. As well as through country bi-lateral agreements.
- Challenges with planning and financing of the COVID-19 vaccine include:
  - Whether finances (including donated finances) are sufficient to vaccine 100% of the eligible population
  - Uncertain environment results in continuously changing of plans with regards to vaccine roll-out and strategy for vaccination

Q3: What challenges do you anticipate with implementing the COVID-19 vaccine roll-out? How does the COVID-19 vaccine roll-out affect your country’s national immunization program and access to other essential services?

- Vaccine hesitancy among health workers
- Vaccine hesitancy among the general population
- Shortage of health workers in health facility to assist with the COVID-19 vaccine roll-out
- The negative impact of the COVID-19 vaccine rollout on other routine health services including routine immunization schedules
- The geographical dispersion of the rural population will be hard to reach
- Financial challenges associated with the roll-out will affect the implementation plan
- Effectively monitoring, recording and responding to AEFI episodes
- Politics and challenges of maintaining the governance mechanisms and structures during emergency situations
MINISTRY OF HEALTH OF MONGOLIA

April 29th 2021
1. How did you design your COVID-19 vaccines strategy? What were your main considerations in doing so? In particular, how are you prioritizing populations for COVID-19 vaccines and why? Where do you anticipate procuring/accessing vaccines from?

- According to recent research, government plans to vaccinate approximately 60% of the total population to overcome this pandemic without any difficulty. Vaccination is planned for the most at-risk groups of the population which began on 23 February.

- Vaccination priority groups includes:
  - Respondas Team,
  - Continuous Operations,
  - Trade and Service Sectors,
  - Educators of all levels,
  - people aged 50-84 and people with disabilities,
  - people over 65 and transplant recipients,
  - people aged 18 to 25,
  - people aged 26 to 49.
A total of 509,740 doses of the vaccine came from India, China, Russia, Korea and COVAX:

- AstraZeneca 164,000 doses
- Sinopharm 300,000 doses
- Sputnik V 20,000 doses
- Pfizer 25,740 doses
2. What are your estimates of costs for providing coverage, and what are the main cost drivers? How is your country/does your country anticipate financing the vaccine coverage (external assistance, domestic health spending)? What challenges do you anticipate with planning and financing COVID-19 vaccine coverage?

- The current 509,740 doses have all come through donations and a $50.7 million loan from the World Bank.

As a result of this investment, we planned to purchase these vaccines from Russia and China.

- SinoPharm 900,000 doses
- SputnikV 1,000,000 doses
3. What challenges do you anticipate with implementing the COVID-19 vaccine roll-out? How does the COVID-19 vaccine roll-out affect your country’s national immunization program and access to other essential services?

✓ We were anticipating financial challenges of immunization, yet we found a way to fund it through World Health Organization soft loan and others.
✓ It was difficult for hospitals to obtain funding because the number of people seeking medical care was reduced, except for essential services. We tried to keep our essential service and immunization program as same as before the pandemic.
THANK YOU FOR YOUR ATTENTION
### Annex.2: List of Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization/Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rachel Devi</td>
<td>Rachel Devi# Fiji# MOHMS</td>
</tr>
<tr>
<td>Vanpheng Sirimongkhoune</td>
<td>Dayo Obure (Dayo Obure)</td>
</tr>
<tr>
<td>Jennifer Anga</td>
<td>Suphab</td>
</tr>
<tr>
<td>Vrshali Shekhar</td>
<td>Martin Schmidt</td>
</tr>
<tr>
<td>DKI Jakarta_Nasruddin Djoko S_Kepala Bappeda Bappeda</td>
<td>Christoph Kurowski</td>
</tr>
<tr>
<td>Aditi Nigam</td>
<td>Wayne Irava - Solomon Islands (WB - Wayne Irava)</td>
</tr>
<tr>
<td>Phillips Kim (World Bank)</td>
<td>Rozita Halina Hussein</td>
</tr>
<tr>
<td>Sukhdari Ugtakhbayar (Sukhdari# MoH# Mongolia)</td>
<td>peter cowley WHO WPRO Manila (peter cowley)</td>
</tr>
<tr>
<td>Ping-WB</td>
<td>Amelia Z.</td>
</tr>
<tr>
<td>Praveen Chakkaravarthy WB-IT (Praveen)</td>
<td>Eric Salenga WHO PNG (WHO PNG Eric Salenga)</td>
</tr>
<tr>
<td>Chanhsy-WB (Chanhsy SAMAVONG)</td>
<td>Danielle Bloom (Dandy’s iPhone)</td>
</tr>
<tr>
<td>Chimgee WHO MNG</td>
<td>WB Mesulame Namedre</td>
</tr>
<tr>
<td>Aparnaa Somanathan</td>
<td>PNG</td>
</tr>
<tr>
<td>Atikah Adyas (UMITRA)</td>
<td>Rozita Halina Malaysia</td>
</tr>
<tr>
<td>Mike Michael</td>
<td>Lachlan McDonald</td>
</tr>
<tr>
<td>Saw Chien Gan</td>
<td>Soulaxay Bounthideth (WB (Soulaxay bounthideth))</td>
</tr>
<tr>
<td>Esther Wabuge (Esther Wabuge)</td>
<td>Federica Margini</td>
</tr>
<tr>
<td>Jennifer Anderson (Jennifer Anderson)</td>
<td>Valeria de Oliveira Cruz</td>
</tr>
<tr>
<td>M</td>
<td>Tsolmon</td>
</tr>
<tr>
<td>DOH-Maricar Rodriguez</td>
<td>Wei Aun Yap</td>
</tr>
<tr>
<td>Tomas ROUBAL (ROUBAL/# Tomas)</td>
<td>Viroj Tangcharoensathien</td>
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<tr>
<td>Emi Masaki (Emiko Masaki)</td>
<td>WPRO Martin Taylor</td>
</tr>
<tr>
<td>Aneesa Arur (Aneesa)</td>
<td>Kamiar Khajavi - 412618</td>
</tr>
<tr>
<td>Dr. Somil Nagpal</td>
<td>Vanpheng Sirimongkhoune (Khack)</td>
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<tr>
<td>Stefan Nachuk</td>
<td>Martin Bosák</td>
</tr>
<tr>
<td>Phone de CARMEN DEL RIO</td>
<td>Dr Fazilah Allaudin (Dr Fazilah Shaik Allaudin)</td>
</tr>
<tr>
<td>Sarah Alkenbrack</td>
<td>Atikah’s iPhone</td>
</tr>
<tr>
<td>Ogo Chukwujekwu WHO WPRO Manila (WHO - Ogo Chukwujekwu)</td>
<td>Armina Sharma</td>
</tr>
<tr>
<td>Jean-Claude Hennicot</td>
<td>Anu WHO MNG</td>
</tr>
<tr>
<td>Ding Wang (Ding Wang)</td>
<td>Hyeseung Wee</td>
</tr>
<tr>
<td>Lauren Franzel - WHO Lao PDR (Lauren Franzel - WHO)</td>
<td>Terence Fusire</td>
</tr>
</tbody>
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7 based on self-identification by participants when joining the virtual meeting platform
<table>
<thead>
<tr>
<th>Piyush Bhutani</th>
<th>Susan Sparkes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hui Wang</td>
<td>Nakato’s iPhone</td>
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<tr>
<td>Nurhafliza Md Hamzah</td>
<td>Ipsita Parida</td>
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<td>Alice Abou-Nader</td>
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<td>Atia Hossain</td>
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<tr>
<td>Nathalie Vande Maele</td>
<td>Nasrudden Djoko S</td>
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<tr>
<td>WHO MNG_Monica Fong</td>
<td>Julie</td>
</tr>
<tr>
<td>Kenneth Lim</td>
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The World Bank’s support to the Joint Learning Network for UHC is made possible with financial contributions from the following partners: