

## COVID-19 Vaccine: Policies and Strategies for Enhancing Coverage

COVID-19 (caused by SARS-COV-2 virus) started from Wuhan, China, in late December 2019 and was soon declared a global pandemic by the WHO. Globally, 176 million cases and almost 0.94 million cases in Pakistan devastated health systems and economies. This public health emergency brought forth a domino effect on multiple sectors. Vaccination is considered as a sustainable solution to overcome the crisis as per the need of the hour <sup>[A]</sup>.

There are eight vaccines approved for COVID-19 worldwide lie in the category of Emergency Use Authorization (EUA). Vaccines that receive early authorization for use in 2020 include Sputnik (Russia), AstraZeneca (UK), Pfizer (Germany), Moderna (United States of America), and Sinopharm (China). Since December 2020, vaccine rollout has started in various countries after local country regulatory approvals. Vaccination challenges started in July 2020 with pre-booking of vaccines by rich countries that triggered global supply chain crises. To date, 2.15 Billion doses of COVID-19 vaccines have been administered globally, with 1.2 Billion in Asia. It includes countries who booked vaccines early or possess the indigenous capacity to produce vaccines, such as China (794 M doses administered) and India (230 M doses administered) <sup>[C]</sup>.

The Government of Pakistan utilized the coordination structure of the National Command and Control Center in sync with Federal and provincial health departments, Essential Preventive Immunization (EPI), and National Disaster Management Authority (NDMA) for COVID-19 vaccination in the country. The Drug Regulatory Authority of Pakistan (DRAP), granted EUA approval to five vaccines (Astrazeneca, Sinopharm, Cansinobio, Sputnik & Sinovac) <sup>[B]</sup>. Before vaccine rollout, Government designated 583 COVID-19 vaccination counters in respective territories under EPI supervision <sup>[D]</sup>. Vaccination rollout started in Pakistan on 4<sup>th</sup> Feb 2021 with 1 million Sinopharm doses to essential healthcare workers. Currently, 1650 vaccination counters exist all over Pakistan. To date, the Government booked 30 million vaccine doses. So far, 10.6 million doses of vaccines are administered with a daily vaccination capacity of 0.5 Million people/day. National immunization management system (NIMS) for monitoring of overall vaccination is managed by NCOC/EPI <sup>[E]</sup>. National Institutes of Health collaborated with CanSinobio Pvt Ltd China to start indigenous COVID-19 vaccine production in Pakistan. The Government aims to vaccinate more than 70 million of its citizens in the year 2021 <sup>[E]</sup>. Government needs to tap multiple avenues for expanding vaccine coverage, including intense coordination for effective risk communication, scale-up of vaccination infrastructure, vaccine availability, indigenous production, community involvement and mandatory vaccination. Therefore, the following questions are proposed for strategic deliberation among stakeholders to increase vaccine coverage in Pakistan.

1. What are the challenges of COVID-19 vaccine coverage in Pakistan & other developing countries?
2. What specific policies and strategies are needed for improving COVID-19 vaccine coverage?
3. What are the current trends of COVID-19 vaccine coverage at the national and provincial levels in Pakistan. How do these trends compare to the other regional and international situations?

### References:

- A. Global COVID-19 data repository [www.worldometers.info](http://www.worldometers.info)
- B. COVID-19 vaccine track repository [www.covid19.trackvaccines.org](http://www.covid19.trackvaccines.org)
- C. COVID-19 vaccine coverage data repository [www.ourworldindata.org](http://www.ourworldindata.org)
- D. National Vaccine deployment plan 2021, EPI, MoNHSRC
- E. National COVID-19 data repository and updates [www.ncoc.gov.pk](http://www.ncoc.gov.pk)