

Pandemics: No country is an island: collective approach to COVID-19 vaccines is the only way to go

Saturday 16 January 2021, by [FALLAH Mosoka](#) (Date first published: 14 January 2021).

As countries across the world begin to purchase and roll out COVID-19 vaccines, a key question is how far the vaccine is from reaching Africa and how accessible it will be for the continent. Moina Spooner, Commissioning Editor with The Conversation Africa, asked Mosoka Fallah, an expert on infectious diseases, to provide his insights.

What are the options for developing countries?

The last I checked, [the cost](#) of the current COVID-19 vaccines (which demonstrated the most efficacy) ranged from \$19.50 per dose (Pfizer-BioNTech mRNA vaccine) to around \$37 per dose (Moderna mRNA vaccine).

This is expensive. By comparison, the pneumococcal conjugate vaccine [is available at](#) US\$2.00 per dose. The vaccine is used to protect infants, young children, and adults against disease caused by the bacterium *Streptococcus pneumoniae*.

COVID-19 has shattered the [already weakened](#) economies of low- and middle-income countries through lockdowns and border closures. This, coupled with massive debt repayment that has handicapped many countries, means that if these nations attempt to buy these vaccines at current market prices, more than half of the world [will be plunged](#) into deeper poverty.

Simply put, developing countries can't buy the vaccines outright. The reality is that some contributions will need to be made by the developing country. And a framework for this has emerged, known as [COVAX](#).

In my opinion, this is the best option for developing countries to solve their current dilemma. Another option would be to give countries like South Africa and India intellectual property rights to manufacture the vaccines, a move which was opposed by a number of countries at the World Trade Organisation meeting.

How does COVAX work?

COVAX is co-led by vaccine alliance - GAVI, the Coalition for Epidemic Preparedness Innovations and the World Health Organisation (WHO). As of now, [COVAX has 190 participating economies](#). The United States has yet to join.

COVAX works by collectively pulling donations from rich developed countries, philanthropists - like the Bill and Melinda Gates Foundation - and private donors together. These pooled funds are used to fund the research, development and manufacture of successful vaccine candidates. Once a vaccine candidate proves to be efficacious, it can be made available to countries irrespective of the financial

means to pay.

This method also reduces [risk](#) for countries that may have only purchased one or two types of vaccine.

The [plan](#) is to make available the first two billion doses to all members of the coalition. While the targeted two billion doses aren't enough, they plan to target vulnerable populations as the first line of defence.

So far, COVAX has [secured contracts](#) of two billion doses of COVID-19 vaccines which will be rolled out when they're delivered. Most of the pre-orders [are from](#) AstraZeneca and the Serum Institute of India.

As it stands there are three categories of country that will greatly benefit from COVAX:

Is a collective approach the best way?

The collective approach has been shown to work under different models and it enhances negotiation for reduced pricing.

For instance, over the past 20 years GAVI has [successfully procured](#) vaccines using collective contributions from poorer countries, donor countries and donations. This accelerated the immunisation of children from poor countries.

The World Food Programme does [collective procurement](#) of food items during emergencies, obtaining commodities at much reduced prices.

Even with a narrow profit margin, the large market created by a collective approach to COVID-19 vaccinations provides a favourable response from vaccine manufacturers and pharmaceutical companies.

Manufacturing companies are in it for profit. At the current cost only a few countries would be able to buy the vaccine, but through COVAX they are assured of funding for more buyers. COVAX also bears the risk if the candidates do not reach final approval by the regulators in a particular country.

What are its shortcomings?

Despite its altruistic and noble intentions, there are a few challenges that need to be overcome if COVAX is to be a success.

First, the projected funds needed to invest in the research, development and manufacture of these potential vaccines [has not](#) been raised.

Though there's a lot of goodwill, it must be matched with financial contributions to meet the costs required to get these vaccines ready. COVAX [needs at least](#) US\$4.6 billion in 2021 to procure doses of successful candidates.

Second, the process of identifying, and then approving, successful vaccines is still in its infancy. [Only two](#) - Pfizer-BioNTech and Moderna - are authorised and recommended to prevent COVID-19. And there are currently [more than](#) 50 COVID-19 vaccine candidates in trials, many of which will not be successful. [Reports](#)

[suggest](#) that only 7% of the vaccines in the pre-clinical trial stages would make it to the clinical trial stage. Then only 20% of those candidates will be successful.

This will be a high risk investment that is racing against time.

The [recently reported](#) mutated strain of the virus shows why candidates must be quickly identified. The new variant seems to be covered by the existing vaccines but future new strains might not be.

Finally, the failure of the US to join COVAX [could challenge](#) the extent to which the coalition can reach resources and funding.

What are its advantages?

Because it involves a large coalition it has the major advantage of coalescing the best of resources, expertise and goodwill.

It also offers a certain insurance for both low-income and rich developed countries to access the approved vaccine for their population.

[See also available on ESSF (article 56483), [Pandemics: What is COVAX and why does it matter for getting vaccines to developing nations?](#).]

Will it deliver?

In spite of all the challenges and the current inequalities created with the approved vaccine candidates, I believe COVAX will deliver.

It will do so because it has built the largest coalition and it's in the best interests of everyone to ensure that COVAX succeeds. Unless nations that have procured the current expensive vaccines become isolated islands, they risk reinfections with new mutated strains. This will continue to present a clear and present danger to our world.

History has repeatedly demonstrated that when humanity comes together to defeat a common enemy, we always win. <http://theconversation.com/republishing-guidelines> —>

[Mosoka Fallah](#), Part-time lecturer at the Global Health & Social Medicine, Harvard Medical School and lecturer at the School of Public Health, College of Health Sciences, [University of Liberia](#)

P.S.

- The Conversation. 14 janvier 2021, 15:32 CET.

Cet article est republié à partir de [The Conversation](#) sous licence Creative Commons. Lire l'[article original](#).

[Mosoka Fallah](#), [University of Liberia](#)

Avant de partir...

En période de pandémie, l'information factuelle est vitale. Nous travaillons avec des expertes et des experts - épidémiologistes, immunologues, scientifiques et spécialistes des politiques publiques - pour vous livrer des analyses basées sur la recherche, en totale transparence et en toute indépendance. Si vous le pouvez, [faites un don mensuel pour nous soutenir](#).

Fabrice Rousselot

Directeur de la rédaction