

COVID-19: Deliverance in small glass vial coming but Geopolitics need to be 'vaccinated' first!

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(The world of Indirect Taxation will always have a nagging grudge against COVID-19 which has snatched away 'Bhishm Pitamah'

of tax publishing in India. I extend my heartfelt condolences to Mr R K Jain's family! May Lord comfort his soul and his loved ones!)

By Shailendra Kumar, Founder Editor

HISTORY

of vaccinology, virology and epidemiology clearly establishes that science has always been a laggard! Quite naturally! Because it takes years to collect data, design experiments, conduct several phases of human trials and verify final results! However, going by a stream of good news pouring out with details of very high efficacy of COVID-19 vaccine with manageable side-effects **a la**

Moderna and Pfizer initial trial findings and the same being greeted globally with whoops of joy, the historical myth seems to have been buried. Evidently, the global scientific community has prolifically learnt from their sluggish responses to outbreaks in the past! That is how humanity is barely a few weeks away from Deliverance in the form of a small glass vial!

Coronavirus has devoured more than a million precious lives and rampaged the global economy to a crippling degree. The pandemic is barely one-year-old but it has literally fatigued frontline workers, policy makers, political leadership and the common man who have begun to demonstrate precarious side effects in the form of mass mental illness and widespread suicide. The only glimmer of hope is an effective vaccine against the fast-mutating pathogen and scientists globally, in blazing display of bravura, seem to have delivered it within a record time! It has never happened in the past! What has made it possible is the combination of tech-enabled pharma companies and strong political leadership opting for risky investments in research and development of vaccines!

For instance, the Trump Administration which recently suffered a huge political blow on account of the marauding pandemic had pumped in USD 2.5 billion in the hugely risky R&D by the biotechnology firm Moderna which has claimed 95% efficacy for its vaccine last Monday. Moderna's claim has come back to back with Pfizer making a promising claim of 90% effectiveness for its vaccine - both following mRNA route. Unlike in the past when vaccines used to be based on the virus particles or inactivated strains, COVID-19 vaccines are starkly different - based on viral genomes. And it has worked faster with greater efficacy!

There are as many as 170 vaccine candidates across the world. India alone has 22 such candidates which are at different stages of development. In the next four months, there is going to be unfolding of similar news at an interval of every 10 days. Availability of two-jab-vaccine has become a *fait accompli*

. Although the real challenge for most developers is going to be the storage at room temperature and to ensure effectiveness not only in protecting the vaccinated person but also in stymieing further infection from the immunised person. I am sure that the global scientific community would succeed in answering all such hitherto quizzical questions in the coming months. However, what may constitute much grimmer and testy challenge for the world is the conspicuous absence of a time-tested supply chain of proven credentials for its equitable distribution and acute possibility of 'vaccine nationalism' coupled with churlish 'vaccine diplomacy'!

Let's consider some of the recent missteps of China which has given a short shrift to long-standing rules in order to race ahead in distributing COVID-19 vaccine to win over Middle East countries. Even before clinical trials are wrapped up, China has gone for mass roll-out of vaccines. Chinese company Sinopharm has provided doses of vaccine to the UAE. It has gone for its phase 3 trial in many West Asian countries like Egypt, Jordan, Bahrain and others. China is apparently hoping that if its vaccine turns out to be safe and effective it would be able to expand its geopolitical influence before the West comes up with their own vaccines and donate them to low-income countries. If the trial fails, it would extract huge human costs but it would not be of Chinese nationals! A stinking piece of vaccine diplomacy, indeed! Smelling it in time, Brazil has cancelled the phase 3 trial of Chinese vaccines.

Let me now switch to 'vaccine nationalism' being practised with a heavy dose of hawkishness and solipsism by some rich countries. Though COVID-19 is a worldwide crisis, leaving none unaffected but there is already a scramble among the affluent countries to corner a major share of the first lot of stocks in the making. A good number of such countries are yet to join the WHO-led global initiative called COVAX. It is a global alliance of rich and low-income countries for funding development and distribution of vaccines. However, affluent countries are seemingly

pursuing a predatory policy at the cost of poor countries and have managed to corner over 50% of vaccines in the making through Advance Market Commitments (AMC).

Obviously, a canyon would initially exist between what is needed and what is going to be manufactured! America which has not joined COVAX, has pre-ordered about one billion vaccines from six most promising vaccine makers. This amounts to three doses per American. Canada has booked orders - 10 jabs per citizen. Australia has gone for five jabs per citizen. Russia has also not joined COVAX. Though EU has boarded the COVAX bus but many of its members have also gone for bilateral arrangements and pre-booked vaccines in millions.

In other words, what is going to be left for COVAX facility is barely 500 mn jabs. And it is to be equitably distributed among as many as 180 countries

. As per COVAX policy, it would first provide sufficient jabs for 3% of population of each member country so that Corona warriors could be immunised first. Depending on availability of remaining stocks, more may be allocated for a maximum of 20% of population of each country. One of the major challenges COVAX is facing today, is the fund crunch. It has so far garnered

barely USD five billion whereas it needs over USD 50 billion to pre-order sufficient stocks and also hard-negotiate the price as a bulk buyer. It is learnt that it has already achieved USD three rate per jab.

Strangely, economic stimuli worth over USD 10 trillion have been spent to deal with the pernicious impact of the pandemic so far but the affluent countries have failed to bankroll the development of vaccine requiring funds to the tune of USD 100 billion.

Take the case of Pfizer. It invested its own funds of USD two billion to develop the vaccine. Had the rich countries come together to apportion the risk of R&D, these drug makers would perhaps have come out much faster with not only vaccine but also other drugs to treat critical patients

. Secondly, gargantuan investment is entailed to expand the manufacturing capacities so that there is enough for at least half of the world population. Going by the present manufacturing infrastructure, a major swathe of which is available in India, not even 30% of global population can be immunised by the end of 2021!

Finally comes the insuperable challenge of global logistics to transport the vaccines to over six billion people. Storage of vaccines coupled with mountains of needles and vials is going to be a Herculean task which would not only hinder the speed of distribution but would also lead to wastage if enough freezers are not made available. It is going to be an unparalleled global supply chain which has to be built with care and minimum politics to ensure fair distribution of vials. It would also depend on the type of vaccines which may require ultra cold freezers or normal temperature freezers. Adequate supply of syringes, needles and glass vials is going to be a dinosaurian problem which cannot be solved on the hoof! An associated problem which global political leadership may have to deal with in future is going to be the hoarding of vaccines by the 'Shylocks' in the industry. Such a problem may get exacerbated if hoarders earn the backing of kleptocratic political forces in poor countries.

Back home in India, things may not look up too bright! Though India's vaccine manufacturing capacity is unmatched in the world and is vital for producing billions of doses but it is also going to confront one of the most politically-fractious tasks ahead. As many as 22 vaccine candidates (Central Govt has invested in many of them) are beavering away at various stages of development. At least four of them have entered into phase 3 trial. India may expect its indigenously-developed Vaccines by March 2021. However,

painful period would roll out only after vaccines are available on the plate.

India would receive a piddling share from COVAX facility and may manufacture indigenously-developed vaccines in millions but by all optimistic yardsticks, it may not be able to immunise more than one-fourth of its population by 2021-end. It would take at least 30-36 months for India to provide twin jabs to its entire population.

The scenario is going to be much grimmer and grotesque for low-income countries which will have to wait for the surplus stored by the rich countries but not needed by their citizens. Once they donate generously or fund through COVAX facility along with a smarter expansion in the

global supply chain, COVID-19 may be banished from the planet. Till the time it is eradicated from all the corners of the world, no country, no matter how affluent one may be, can be expected to have a fireball in place against future mutation of the mutation-loving Corona family of viruses! I sincerely hope that affluent countries are in the know of such a reality and may rise above the plank of vaccine nationalism and do everything to vapourise the virus with no trace of it on our planet!