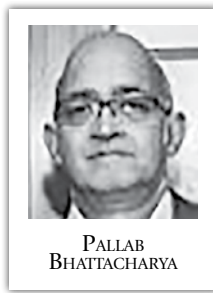


# The future of Covid-19 vaccines: Will there be a patent waiver?



PALLAB BHATTACHARYA

As much of the world continues to reel under the coronavirus crisis, there is an increasingly frantic scramble for more and more vaccines in countries

seeking to protect their people against the disease. One of the possible solutions to the vaccine crunch which is being talked about now, particularly in low and middle-income countries, is a temporary waiver of intellectual property rights for Covid-19 vaccines under the umbrella of the 164-member World Trade Organisation (WTO).

The patent waiver was proposed jointly by India and South Africa at the WTO in October last year to temporarily do away with the provision relating to not only vaccines but all Covid-related medicines and technologies under the agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Interestingly, there has been no mention as to how long the waiver should be in place. More than 100 countries have so far backed the waiver move.

Bangladesh, South Korea and Canada are among the countries which have expressed interest in the domestic manufacture of Covid vaccines if a patent waiver happens. In an important development, the Joe Biden administration in the United States has come out with support. This has been followed by a re-thinking on the part of waiver opponents like Japan,

Australia, European Union, Germany, New Zealand and Canada, whose reservations against the waiver has held up any movement on the issue for months. Bangladesh has already shown interest in manufacturing foreign jabs in its own facilities. India too has offered to hold human trials of its indigenously-developed vaccine Covaxin and manufacture it in Bangladesh.

The text-based negotiations on the issue are expected to begin at the end of this month, and a lot depends on how the talks pan out for the simple reason that the devil always lies in the details in fine print. Secondly, the US has committed its support only to a patent waiver for Covid vaccines, rather than to all the virus-related technologies and testing material. Thirdly, several countries now backing the waiver may be prodded to change their stance at the time of the final negotiations at the WTO, where any country can veto the move. So, there are major hurdles still to be overcome.

There is a general consensus among developing countries that the TRIPS waiver on the Covid-19 vaccine is expected to open up considerable space for their production in other countries' own facilities. If the waiver is granted, countries like India, which has a proven track record of vaccine manufacturing, may stand to gain by locally producing vaccines like Pfizer and Moderna, which at present enjoy patent protection. This will also boost global supplies, particularly in developing and poor countries. It is believed that the patent waiver may allow broad-based production centres of vaccines like Moderna, Johnson & Johnson, Pfizer,



PHOTO: REUTERS/AGUSTIN MARCIARIAN

Leftist groups protest outside the mAbxience laboratory to demand its expropriation, amidst the Covid-19 outbreak, in Garin, on the outskirts of Buenos Aires, Argentina on March 29, 2021. The placard reads: "Vaccines for all".

Covaxin and Novavax, most of which are now manufactured in the developed world, by shifting some to middle-income countries.

As was expected, the multinational pharma lobby has swung into action, building up opinions against the patent waiver. It points out that the TRIPS Agreement already safeguards for public health emergencies, such as through the provision for exception to "government use" under adequate payment to the patent owner. The difference is that a waiver would do away with this provision. What the pharma companies point out is that out of the eight Covid

vaccines authorised so far for emergency use in different countries, five, including Covishield of Oxford AstraZeneca, Covaxin of Bharat Biotech and Sputnik V, are already licensed or manufactured in India.

The pharma lobby also points out that a patent waiver does not guarantee expediting and increasing vaccine production in middle and low-income countries, which need to ramp up their own manufacturing facilities, an exercise that is time-consuming and does not happen overnight, particularly in those countries which are new to the sector. In an interview to Sky News, Microsoft

founder Bill Gates, one of the critics of the patent waiver, suggested that many developing and poor countries do not have the manufacturing facilities required to churn out vaccines, and if vaccine technology is transferred to these countries, it has to happen with grants and technological assistance from developed countries.

The counter to the opponents of a patent waiver is that a country like India has a big and highly reliable generic (copycat) medicine production sector built up over decades, since the early 1970s, with the help of process patenting rather than product patenting. It was this that allowed a company like Cipla to manufacture HIV drugs in the 1990s in India and supply them to African countries. However, the TRIPS Agreement in 2005 forced India to switch to product patent.

The challenge is not merely that of scaling up vaccine production facilities. There is the issue of accessing critical raw materials and ingredients like plastic bags, filters and some mediums used in vaccines production, a problem that has been encountered by the Serum Institute of India while manufacturing Covishield, after the US invoked the American Defence Production Act to stop the export of the raw materials needed for manufacturing the vaccine. Many of the inputs that go into the manufacture of vaccines are also patent-protected. Will the developed countries easily allow their commercial interests to be compromised for the sake of altruism in the race for vaccines?

Pallab Bhattacharya is a special correspondent of The Daily Star. He writes from New Delhi, India.

# Inspiring Bangladeshi girls towards STEM, one role model at a time



LAILA KHONDKAR

Dr Firdausi Qadri of Icdtrb, Dr Salma Sultana of Model Livestock Advancement Foundation and Prof Samia Subrina of Bangladesh University of Engineering and Technology (BUET)—three Bangladeshi women scientists have

recently made us proud. They were included in the sixth edition of the Asian Scientist 100 list, which is a Singapore-based science and technology magazine. The list was published to celebrate the success of the region's "best and brightest, highlighting their achievements across a range of scientific disciplines." A few months ago, another young Bangladeshi astrophysicist, Tonima Tasnim Ananna, topped the 2020 edition of Science News magazine's list "The SN 10: Scientists to Watch", for her outstanding work and research on black holes.

These achievements are significant, as underrepresentation of women and girls in the workforce and in higher education with regard to the fields of Science, Technology, Engineering and Mathematics (STEM) remains a serious problem. Although women around the world are defying gender stereotypes and making meaningful contributions in science, there is still a long way to go.



PHOTO: COLLECTED

Without STEM education and work opportunities, women will not be able to realise their full potential. They risk continuing to be unemployed or in low-paying jobs that may not exist in the near future due to technological changes. They will also miss out on future jobs, as shifting economies demand diversified skills. According to the 2000 UNICEF report titled "Towards an equal future: Reimagining girls' education through STEM", women and girls face difficulties in accessing quality learning opportunities in STEM. Girls tend to outperform boys in reading skills in most regions, but they are under-represented amongst top performers in STEM subjects. Girls' career expectations are marred by gender stereotypes. More boys than girls aspire to a career as a scientist and engineer (in 72 out of 78 countries) or an ICT professional (in all countries). However, more girls than boys

are interested in a career in the health sector (in all countries). Research has shown that by age 15, girls begin to lose confidence in STEM subjects, unlike boys. By the age of 16, only 25 percent of girls asked to draw a scientist will picture a female. This loss of confidence is a direct result of the challenges women face when pursuing STEM education and careers. Stereotypes about STEM as masculine subjects and social norms about what girls can and should do are reproduced in teachers' and

parental expectations. This shapes girls' beliefs and attitudes towards STEM. Begum Rokeya wrote in *Motichur* in 1904: "We shall do whatever is needed to be equal to men. If we have to earn independently in order to gain independence then we should do that... Why shouldn't we earn? Don't we have hands, legs, and intellect? Can't we engage in business with the amount of energy that we spend in household work in the husband's place?... Why are we crying if the girls are not married off. Educate your daughters properly and let them enter the workplace; they can earn their own livelihood."

While we have come a long way from the time of Begum Rokeya in terms of girls' education, it is important to examine what girls are studying. Is education preparing them to be an active member of society? Technology is influencing various aspects of our lives including education, employment, communication, healthcare, entertainment, etc., and will shape our future. It is extremely critical that we engage more girls and women in STEM if we do not want the world to be continued to be designed by and for men.

Bangladeshi society places a disproportionate emphasis on women's reproductive and caregiving roles. As a result, they face a lot of barriers to excelling in their chosen professional fields, including STEM. I have known many young women with brilliant academic results in STEM subjects at the university level in Bangladesh. Most of them could not dream freely about their careers, as family and society posed restrictions on what is expected from them.

The following could be done to facilitate active participation of girls and women in STEM related education and jobs. Celebrating female role models is very important. Nearly half of all girls interested in STEM do not know a woman in a STEM career. In a recent interview, Tonima Tasnim Ananna mentioned that her interest in astronomy grew from an early age (five years) when her mother told her stories about the Pathfinder spacecraft landing on Mars. Since then, Tonima dreamt of becoming a scientist and could not visualise being anything else. Parents must raise girls in a confident way, which will inspire them to be ambitious and courageous in realising their dreams. Parents and caregivers should choose books, toys, animation films, etc. for children very thoughtfully so that they can be themselves without feeling confined by gender stereotypes.

Do we want our girls to aspire to be scientists and reach leadership positions in their chosen fields? If yes, popular culture (television, magazine, drama, films, advertisements, etc.) must stop showing women in passive roles, obsessed with beauty and performing household and caregiving responsibilities only. There should be conscious efforts by all to portray successful women in STEM and other sectors.

Evidence from different parts of the world suggests that when educators talk to girls about STEM and actively encourage them, girls become more interested in these subjects. It is important to engage girls in hands-on STEM activities and/or let them shadow a STEM job for a certain period. Both men and women well-established in STEM careers can be mentors to young girls.

State and employers should develop new policies on parental and family related leave and ensure that men perform child-rearing as well as other household responsibilities. This will contribute to changing dynamics within families and will support women in building careers in various fields. Social norms should be changed, and all

members of society must learn to treat men and women equally, and value women's academic and professional achievements. Only then will girls and women be able to contribute to all fields, including STEM, according to the best of their abilities.

Laila Khondkar is an international development worker.

**QUOTABLE Quote**

**IMMANUEL KANT (1724-1804)**  
German philosopher and Enlightenment thinker

*Happiness is not an ideal of reason, but of imagination.*

**CROSSWORD BY THOMAS JOSEPH**

**ACROSS**

- 1 With skill
- 5 London lockup
- 9 Floor-board sound
- 11 Painter Matisse
- 12 Heat setting
- 13 Sports setting
- 14 Purpose
- 15 Scintillate
- 17 Straw hat
- 19 Auditor's org.
- 20 Snide look
- 21 Coral island
- 22 Rank above maj.
- 24 Touch lightly
- 26 Bolt from Jamaica
- 29 Tennis star
- Shriver

**DOWN**

- 1 High points
- 2 Precipices
- 3 Intro
- 4 Orange tuber
- 5 Start of an idea
- 6 Lack of vitality
- 7 Cantankerous
- 8 Tale tellers
- 10 Fate
- 11 Locks
- 16 Sleuth Poirot
- 18 Dissolve
- 21 Chowder chunk
- 23 Brother of Isis
- 24 "Parks and Recreation" town
- 25 Female friends, to Fernando
- 27 "Count me in!"
- 28 "Taken" star
- 29 Sacred song
- 30 Hook's helper
- 31 Utter over
- 33 Overlook
- 37 Small tablet

**YESTERDAY'S ANSWERS**

A D D S A N S U P B A E E Z  
 B A N A N A O S L O  
 S M A R T I C O O K I E  
 F A R E S T U D  
 J A D E H O S T E D  
 A X E T O N I C E  
 Y E L L O W E C O N  
 S E A N P L A Y  
 W I S E C R A C K E R  
 I D O L A C T I V E  
 G O D S T E S T E D

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স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়  
স্বাস্থ্য শিক্ষা ও পরিবার কল্যাণ বিভাগ  
জাতীয় জনসংখ্যা গবেষণা ও প্রশিক্ষণ ইনস্টিটিউট (নিপোর্ট)  
১৩/১, শেখ সাহেব বাজার রোড, আজিমপুর, ঢাকা-১২০৫  
[www.niport.gov.bd](http://www.niport.gov.bd)  
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তারিখঃ ২৮ বৈশাখ ১৪২৮ বঙ্গাব্দ  
১১ মে ২০২১ খ্রিষ্টাব্দ

নং-৫৯.১২.০০০০.০০১.৩০.৫৭২.২০২০-৪০৪

|   |  |   |                |                  |  |
|---|--|---|----------------|------------------|--|
| ১. মন্ত্রণালয়/বিভাগ                        | স্বাস্থ্য শিক্ষা ও পরিবার কল্যাণ বিভাগ, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়।   |   |                |                  |  |
| ২. বাস্তবায়নকারী সংস্থা                    | জাতীয় জনসংখ্যা গবেষণা ও প্রশিক্ষণ ইনস্টিটিউট (নিপোর্ট)।   |   |                |                  |  |
| ৩. প্রকিউরিং এনটিটির নাম                    | মহাপরিচালক, নিপোর্ট, আজিমপুর, ঢাকা।  |   |                |                  |  |
| ৪. প্রকিউরিং এনটিটির কোড                    | ১৬২০৫০১৩২৫২১০১   |   |                |                  |  |
| ৫. প্রকিউরিং এনটিটি জেলা                    | ঢাকা।  |   |                |                  |  |
| ৬. যা ক্রেতার জন্য দরপত্র আহ্বান করা হয়েছে | ক্রমিক নং ১৮ এ বর্ণিত।   |   |                |                  |  |
| ৭. দরপত্র বিজ্ঞপ্তি নং                      | নং-৫৯.১২.০০০০.০০১.৩০.৫৭২.২০২০-৪০৪  |   |                |                  |  |
| ৮. তারিখ                                    | ১১/০৫/২০২১খ্রিঃ।   |   |                |                  |  |
| কী ইনফরমেশন                                 |  |   |                |                  |  |
| ৯. ক্রয় পদ্ধতি                             | উন্মুক্ত দরপত্র (OTM)।   |   |                |                  |  |
| অর্থের উৎসের তথ্য                           |  |   |                |                  |  |
| ১০. বাজেট ও অর্থের উৎস                      | পরিচালন (জিওবি)।   |   |                |                  |  |
| পার্টিকুলার ইনফরমেশন                        |  |   |                |                  |  |
| ১১. প্রস্তাবিত দরপত্র প্যাকেজ নং            | ক্রমিক নং ১৮ এ বর্ণিত।   |   |                |                  |  |
| ১২. প্রস্তাবিত দরপত্র প্যাকেজের নাম         | ক্রমিক নং ১৮ এ বর্ণিত।   |   |                |                  |  |
| ১৩. দরপত্র বিক্রয়ের শেষ তারিখ ও সময়       | ৩০/০৫/২০২১খ্রিঃ বিকাল ৫.০০টা পর্যন্ত।  |   |                |                  |  |
| ১৪. দরপত্র দাখিলের শেষ তারিখ ও সময়         | ৩১/০৫/২০২১খ্রিঃ দুপুর ১২.০০টা পর্যন্ত।   |   |                |                  |  |
| ১৫. দরপত্র বিক্রয় ও জমা দেয়ার স্থান       | (ক) জাতীয় পরিচালনা ও উন্নয়ন একাডেমি (এনএপিডি), নীলক্ষেত্র, ঢাকা।<br>(খ) বিভাগীয় পরিবার পরিচালনা কার্যালয়, আজিমপুর, ঢাকা।<br>(গ) জাতীয় জনসংখ্যা গবেষণা ও প্রশিক্ষণ ইনস্টিটিউট (নিপোর্ট), ১৩/১, শেখ সাহেব বাজার রোড, আজিমপুর, ঢাকা, হিসাব শাখা (৩য় তলা)। |   |                |                  |  |
| ১৬. দরপত্র খোলার স্থান, সময় ও তারিখ        | জাতীয় জনসংখ্যা গবেষণা ও প্রশিক্ষণ ইনস্টিটিউট (নিপোর্ট) সভাকক্ষ, আজিমপুর, ঢাকা-১২০৫, দুপুর ১২:৩০টা, ৩১/০৫/২০২১খ্রিঃ।   |   |                |                  |  |
| ১৭. দরপত্র জমাদানকারীর যোগ্যতা              | বর্ণিত মালমাল সরকারের ক্ষেত্রে ন্যূনতম ০৫ (পাঁচ) বছরের অভিজ্ঞতা থাকতে হবে, অন্যান্য প্রাসঙ্গিক যোগ্যতা দরপত্রে উল্লেখ থাকবে।   |   |                |                  |  |
| ১৮. মালমালের সংক্ষিপ্ত বিবরণ                |  |   |                |                  |  |
| ক্রম  | প্যাকেজ নং   | প্যাকেজের নাম   | সংখ্যা/ পরিমাণ | দরপত্রের মূল্য   | দরপত্র জামানত (যাকে গ্যারান্টি/পে-অর্ডারের মাধ্যমে-মহাপরিচালক, নিপোর্ট এর অনুকূলে) |
| ক.  | GOP16 (জিওপি১৬)  | অন্যান্য মনিহারি  | দরপত্রে বর্ণিত | ৫০০ (অফেরতযোগ্য) | ৩৫,০০০/- (ফেরতযোগ্য)   |
| খ.  | GOP15 (জিওপি১৫)  | পরিষ্কার পরিচ্ছন্নতা সামগ্রী  | দরপত্রে বর্ণিত |                  | ২৫,০০০/- (ফেরতযোগ্য)   |
| গ.  | GOP28 (জিওপি২৮)  | ব্যবহার্য সামগ্রী   | দরপত্রে বর্ণিত |                  | ৫,০০০/- (ফেরতযোগ্য)  |
| ঘ.  | GOP06 (জিওপি০৬)  | বৈদ্যুতিক সরঞ্জামাদি  | দরপত্রে বর্ণিত |                  | ৫,০০০/- (ফেরতযোগ্য)  |
| ঙ.  | GOP18 (জিওপি১৮)  | কম্পিউটার সামগ্রী   | দরপত্রে বর্ণিত |                  | ৮,০০০/- (ফেরতযোগ্য)  |
| ১৯.   | দরপত্র আহ্বানকারী কর্মকর্তার ঠিকানা  | উপপরিচালক (প্রশাসন) ও উপসচিব, জাতীয় জনসংখ্যা গবেষণা ও প্রশিক্ষণ ইনস্টিটিউট (নিপোর্ট), ১৩/১, শেখ সাহেব বাজার রোড, আজিমপুর, ঢাকা-১২০৫।   |                |                  |  |
| ২০.   | দরপত্র আহ্বানকারী যোগাযোগের মাধ্যম   | উপপরিচালক (প্রশাসন) ও উপসচিব, জাতীয় জনসংখ্যা গবেষণা ও প্রশিক্ষণ ইনস্টিটিউট (নিপোর্ট), ১৩/১, শেখ সাহেব বাজার রোড, আজিমপুর, ঢাকা-১২০৫, ফোনঃ ৫৮৬১৭৩১৩, ইমেইলঃ <a href="mailto:gdadmin@niport.gov.bd">gdadmin@niport.gov.bd</a>                  |                |                  |  |
| ২১.   | বিশেষ নির্দেশিকা   | ক. সকল ক্ষেত্রে পাবলিক প্রকিউরিং আইন (পিপিআর) ২০০৬, পাবলিক প্রকিউরিং বিধিমালা (পিপিআর) ২০০৬ অনুসরণ করা হবে।<br>খ. দরপত্রে বর্ণিত অন্যান্য শর্তসমূহ কোন কারণ দর্শানো ছাড়াই কর্তৃপক্ষ যে কোন অথবা সকল দরপত্র গ্রহণ বা বাতিল করার সুরক্ষা করেন। |                |                  |  |

মোঃ মিজানুর রহমান  
উপপরিচালক (প্রশাসন) ও উপসচিব  
নিপোর্ট

জিডি-৯৫৪