

**DISCUSSION PAPER** 

# **Toward Global Vaccination:** The Case for the TRIPS Waiver



# **TABLE OF CONTENTS**

1.	ABSTRACT	03
2.	THE TRIPS AGREEMENT: AN OVERVIEW	04
3.	COVID-19: ALL IN THE SAME STORM, NOT IN THE SAME BOAT	05
4.	THE TRIPS WAIVER PROPOSAL	06
5.	ARGUMENTS IN OPPOSITION TO THE TRIPS WAIVER: A CRITICAL ANALYSIS	
	ARGUMENT 1: "AN IPR WAIVER WILL HAMPER FUTURE INNOVATION"	07
	ARGUMENT 2: "MANUFACTURING ISSUES ARE THE REASON FOR THE SUPPLY SHORTAGE, AND NOT INTELLECTUAL PROPERTY RIGHTS"	09
	ARGUMENT 3: "EXISTING FLEXIBILITIES WITHIN THE TRIPS AGREEMENT ARE SUFFICIENT"	10
	ARGUMENT 4: "THE COVAX PROGRAM IS A PERFECT SUBSTITUTE FOR THE TRIPS WAIVER"	13
6.	CONCLUSION	14
7	BIBLIOGRAPHY	15

August 2021

**DISCUSSION PAPER** 

# Toward Global Vaccination: The Case for the TRIPS Waiver

Niha Satyaprakash

In October 2020, India and South Africa submitted a proposal to the TRIPS Council at the WTO to waive the Trade Related Aspects of Intellectual Property Rights [TRIPS] Agreement for the prevention, containment, and treatment of COVID-19.

### **ABSTRACT**

In October 2020, India and South Africa submitted a proposal to the TRIPS Council at the WTO to waive the Trade Related Aspects of Intellectual Property Rights [TRIPS] Agreement for the prevention, containment, and treatment of COVID-19. This set of intellectual property laws, established by the WTO, have historically limited developing countries from accessing crucial medicines and medical equipment in. This trend has only worsened during the pandemic, creating profound inequity in the global vaccine distribution. This discussion paper critically analyses some popular arguments made in opposition to the waiver. Ultimately, the research affirms that easy access to effective vaccination is in the best interest of all nations, therefore the TRIPS waiver should be considered the first step towards a safer and healthier world.

### THE TRIPS AGREEMENT: AN OVERVIEW

The World Trade Organization [WTO] assumes a unique position in the global economy as one of the only multilateral regulators of international trade. By joining the WTO, member countries agree to adhere to specific agreements. One such agreement is the Trade Related Aspects of Intellectual Property Rights Agreement. TRIPS agreement establishes a minimum standard for intellectual property rights that WTO members formalise through national legislation (WTO n.d. a.). For example, the agreement states certain basic provisions and rights for patent holders that all member countries must include in their domestic legislation.

Intellectual Property Rights [IPR] in themselves include copyrights, patents, trade secrets, trademarks, and geographical indications, which are time-limited legal rights granted to investors and creators. Products are generally covered by a series of rights. For example, pharmaceutical medicines such as Remdesivir and Tocilizumab are protected by trade secrets, patents, and copyrights. Patents are the most commonly used form of protection for pharmaceutical innovation and grant market exclusivity to inventors. Grants thereby grant patent owners the right to prevent other players from making, using, or selling patented inventions (World Intellectual Property Organization 2004).

These IPR standards are applicable to medicines and vaccines as well, thereby necessitating an urgent re-evaluation of TRIPS' provisions in current times. These provisions enable patents that last a minimum of 20 years, patents for both products and processes, and protection of pharmaceutical test data against unfair commercial use. Member countries are allowed to introduce more provisions than those set by the agreement as long as they are not contradictory (WTO n.d a).

While the TRIPS agreement arguably succeeded at homogenising IPR laws across the world, it failed to account for the needs and material conditions of member countries. In 1997, South Africa was battling one of its worst HIV/ AIDS crises. The government passed the 'South African Medicines and Related Substances Control Act Amendments', intended to make AIDS medication more affordable. However, international pharmaceutical companies interpreted this to be a direct threat to their medication patents. The companies then filed a lawsuit against the South African government (Halbert 2002). This sparked a debate on the moral aspects of IPR legislations.

Attempts to settle the growing concern around public health protections, led to the Doha Declaration of 2001. Although the declaration was aimed at reaffirming member states' flexibility in getting around patent rights to achieve better access to medical health, structural barriers still remain (Kerry and Lee 2007). As is evident from the South African case, lower and middle income countries are vulnerable to pressures exerted by large pharmaceutical companies COVID-19 has only worsened existing power imbalances.

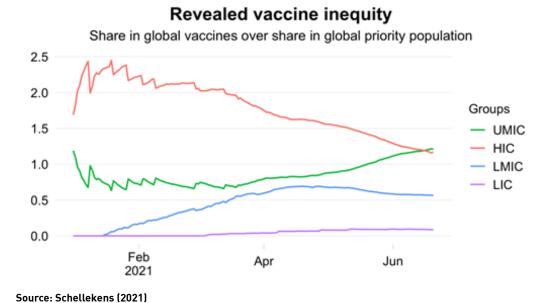
### COVID-19: ALL IN THE SAME STORM, NOT IN THE SAME BOAT

The pandemic, often misread as an 'equaliser', has caused unequal devastation across the globe. For one, the death estimates from developing countries are much higher than previously thought (Gill and Schellekens 2021). On the economic front, developing and emerging economies are the worst hit. As Kristalina Georgieva of the International Monetary Fund (2020) observed, "the same way the virus hits vulnerable people with medical preconditions hardest, the economic crisis hits vulnerable economies the hardest". World Bank President David Malpass warned that the global recession could set back decades of progress in developing countries (Henney 2020).

Despite developing countries suffering disproportionately, they have not received a proportionate share of vaccines. Most high-income countries, such as the United States, United Kingdom, France, and Germany, expect to complete their vaccination drives by the end of 2021. On the other hand, nearly a quarter of the world's population will have access to vaccines only by 2022 and low-income countries, not until 2024. According to So and Woo (2020), 86% of all doses have been administered exclusively in high and upper-middle-income countries. They also report that only 0.1% have reached people in low-income countries. Poor countries also pay higher prices for the vaccines. For example, Uganda is paying USD 8.50 per dose (INR 630) of the AstraZeneca vaccine while the EU is paying only USD 3.50 (INR 260) per dose (Beaubien 2021).

This kind of vaccine nationalism is also self-destructive in the long run. According to a study by the International Chamber of Commerce, no economy can recover fully from the COVID-19 pandemic until vaccines are equally accessible in all countries (International Chamber of Commerce n.d.).

Figure 1: Vaccine Inequity



Mostly due to unfair contracts and lesser negotiating power compared to wealthier countries.

Vaccine hoarding, disruption of supply chains, and scarcity of raw materials are some of the factors causing the inequality in access to vaccines. These disparities thrive on a stringent IPR framework that contributes toward maintaining the structural barriers that continue to take many lives during the pandemic. Fortunately, many countries, including India and South Africa, have become increasingly cognisant of this and seek institutional solutions.

### The TRIPS Waiver Proposal

On 2nd October 2020, India and South Africa submitted a landmark proposal to the WTO titled, 'Waiver from certain provisions of the TRIPS agreement for the prevention, containment and treatment of COVID-19'. The proposal requests a waiver of certain TRIPS implementation, application, or enforcement obligations<sup>2</sup> for WTO members to access COVID-19 related products and technologies. The proposal does not suggest a waiver from all TRIPS obligations, nor does it suggest a waiver beyond what is needed for COVID-19 prevention, containment, and treatment. The proposal was co-sponsored by Kenya, Eswatini, Mozambique, Pakistan, Bolivia, Venezuela, Mongolia, Zimbabwe, Egypt, the African Group, the Least Developed Countries [LDC] Group, and most recently Maldives, Fiji, and Namibia (WTO 2020).

The World Health Organization [WHO] also expressed its support for the waiver. The director-general of the World Health Organization, Dr Tedros Adhanom Ghebreyesus, affirms that a temporary waiver of the intellectual property of the new vaccines is "essential" in achieving WHO's target of vaccinating 70% of the world's population by next year's G7 summit (Inman 2021).

Amongst WTO member countries, the proposal received both praise and criticism. On 6th May 2021, the United States of America changed its previous pro-TRIPS stance and extended its support for the waiver. The USA's shift is particularly surprising given the intense pressure it faced from large pharmaceutical companies. Bill Gates, on behalf of the Gates Foundation, initially stated that he did not think changing intellectual property laws for vaccines would be of any help. However, following criticism from various stakeholders like human rights organisations such as the Human Rights Watch, developing countries, and concerned netizens, the Gates Foundation announced its support toward lifting vaccine restrictions (Cheney 2021). The United Kingdom and Germany on the other hand, have dismissed the need for a waiver, instead urging the global community to focus on other supply-side issues (Inman 2021).

<sup>&</sup>lt;sup>2</sup> Section 1 (copyrights and related rights), 4 (industrial design), 5 (patents) and 7 (protection of undisclosed information) of Part II of the TRIPS Agreement.

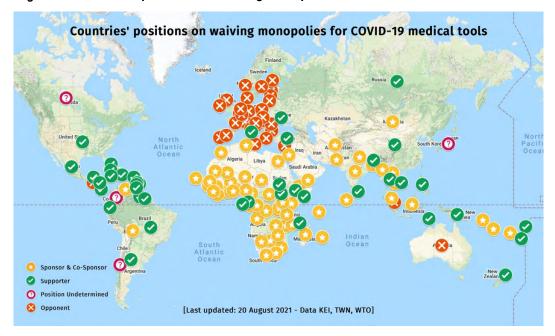


Figure 2: Countries' positions on waiving monopolies for COVID-19 medical tools

Source: Medecins Sans Frontieres (2021)

At the formal meeting of the TRIPS Council on 8-9th June 2021, members decided to initiate a text-based negotiation process³ to address the proposal. Members aimed to reach a consensus when the General Council meets on 22 July 2021. The decision to grant the waiver will require the consensus of all 159 WTO members. In absence of a consensus, the decision can be made by voting. A three-fourths majority is required for the waiver proposal to be accepted. Text-based negotiations may appear to be an acceptance of the waiver proposal. However, the process can be used to delay the waiver altogether.

At this historic juncture, it is important to critically analyse the primary arguments made by waiver opponents from an economic, moral, and legal lens, so as to not yield any ground to them.

# **Arguments in Opposition to the TRIPS Waiver: A Critical Analysis**

**Argument 1:** "An IPR waiver will hamper future innovation"

Skeptics of the TRIPS waiver believe that IPRs act as a necessary market-based encouragement for innovation in the pharmaceutical industry. They argue that IPRs incentivise manufacturers to undertake the risk of investing in research and development by allowing said investor companies to earn appropriate returns. In light of this, an intellectual property laws waiver would deny these investors their 'deserved' returns which will then discourage innovation (Pooley 2021; Ezell 2021).

<sup>&</sup>lt;sup>3</sup> Under text-based negotiations, texts by the committee's chairperson are used to draft an agreement. The draft is based on discussions amongst members and is continually changed until all members agree with the text (Sen 2021).

The premise of this argument is that the TRIPS waiver will leave pharmaceutical companies in losses, which is false. Leading vaccines have already reaped great returns on their own investments. Pfizer's sales in 2021 alone are estimated to be worth \$15 billion (Merelli 2021), as opposed to its claimed costs of \$3.1 billion (Hooker and Polumbo 2020). The Johnson and Johnson vaccine received a preorder of 10 crore doses and significant US government subsidies, which are likely to cover costs (Johnson and Johnson 2020).

A further investigation into the funding sources for most WHO approved vaccines highlights the biggest inconsistency in the skeptic's claim: public sector resources and philanthropic funding have been the main drivers of unprecedented research efforts to date, not pharmaceutical companies. According to data, six front-runner COVID-19 vaccine candidates used \$12 billion of public money for the research and development, clinical trials, and manufacture (Medecins Sans Frontieres 2020a).

Pfizer relied on technology from BioNTech, which received \$445 million from the German government<sup>4</sup> for its research (Griffin and Armstrong 2020). This amount was more than compensated for when Pfizer received pre-orders for 10 crore doses worth \$1.95 billion from the US government (Industry Week 2020). Similarly, the Moderna vaccine cost \$2.5 billion and was entirely funded by the US federal government, hence effectively by taxpayers (Clouse 2020).

The Astrazeneca vaccine, also known as Covishield in India, was entirely developed by a publicly funded lab at Oxford University. The lab was designed to make the vaccine freely available for any manufacturers. However, the Gates Foundation, weaponising the clout it gained after donating \$750 million to Oxford for vaccine development, coaxed the university to sign "an exclusive vaccine deal with AstraZeneca that gave the pharmaceutical giant sole rights and no guarantee of low prices." (Hancock 2020).

Private pharma companies also benefited from prior public research. For instance, public research reduced the corporate costs of clinical testing given the availability of more unpaid volunteers for trials. Moreover, two fundamental components of the Pfizer and Moderna vaccines, namely the viral protein and the concept of RNA modification, emerged from federally funded research (Allen 2020).

Through public investment and advance market commitments, governments systematically de-risked pharmaceutical companies from losses by providing a guaranteed market even before the company vaccines were proven to be safe and effective (Human Rights Watch 2021). Instead, governments undertook the risk of vaccine manufacturing upon themselves. Applying the principle promarket-incentive camp argues for to earn their profit, it's clear that the public should enjoy their returns, and not pharmaceutical companies.

Contrary to the argument posed by skeptics of the waiver, the protection of trade secrets through IPR laws can potentially harm innovation rather than inspire it. Trade secrets protect different kinds of exclusive information including data

<sup>&</sup>lt;sup>4</sup> Such funding is most likely financed by ordinary citizens' tax.

gathered during the regulatory approval process (Bosse, Kang, and Thambisetty 2021). Providing incentives to share these trade secrets could further innovation, as illustrated by Shantha Biotechnic's development of a Hepatitis B vaccine for Indian domestic supply. The vaccine used yeast instead of the traditional bacterial system, allowing production of a low-cost Indian vaccine which went on to become the mainstay of a global vaccination drive led by UNICEF (Chakma et al., 2011).

The claim that the TRIPS waiver, proposed as a temporary measure in response to the COVID pandemic, will discourage future innovation is untrue. Aside from the aforementioned inconsistencies, there is also no reasonable evidence to believe that relaxing the IPR laws will become a recurring activity. The pressures exerted by the pharmaceutical lobby, and jurisprudential demand to protect intellectual property will ensure that IPR laws are enforced in more stable times when people's lives are not dangling in the midst.

**Argument 2:** "Manufacturing issues are the reason for the supply shortage, and not Intellectual Property Rights"

One of the most popular arguments against the TRIPS Waiver has been that supply shortages for medicines and vaccines are not caused by IPR restrictions, but because of inadequate infrastructure and weak distribution channels (Ezell 2021). Some critics have gone so far as to say that developing countries do not possess the ability to manufacture large-scale, complex technologies, let alone distribute them (Public Citizen n.d.).

Consider the case of Remdesivir, a drug widely used in treating COVID-19. Remdesivir's base compound's primary patent is granted to Gilead, a leading pharmaceutical company, in more than 70 countries. This means that those countries which are not covered by a voluntary license or do not use other patent overcoming measures may be blocked by IPR legislations from getting access to Remdesivir or its alternatives until 2031 (Heeboll-Nielsen and Sommer 2020). Though Gilead signed voluntary licensing agreements, they were with a few manufacturers of Gilead's choosing and excluded nearly half of the world from accessing more affordable generics (EP News Bureau 2020).

Intellectual property can also pose a barrier to produce testing kit reagents<sup>5</sup>. These reagents include COVID-19 testing kits which are an essential part of controlling the pandemic. Without them countries' and laboratories' ability to screen samples for COVID-19 are negatively impacted. A majority of laboratories in the Netherlands heavily relied on Roche, a pharmaceutical company, for testing reagents. Despite running into a shortage for the buffer in the early stages of the pandemic, Roche refused to share its recipe, thereby blocking laboratories from making their own solution and ramping up their testing capability (Silverman 2020).

Patents have also been granted to several other large pharmaceutical companies across the entire process of vaccine development, production, and use. These patents increase both uncertainty and costs while delaying competition and

<sup>&</sup>lt;sup>5</sup> The liquid buffer needed to run the tests. It acts as a litmus test for proving samples COVID-19 positive or negative.

keeping prices high for low to middle-income countries, hindering worldwide accessibility to important vaccines (Borrell 2007). It then becomes clear that IPRs do contribute to supply shortages, contrary to waiver skeptics' opinion.

Understanding that IPRs make life-saving vaccines and medicines inaccessible for most of the world, makes it easier to see how waiving the TRIPS will increase the production of such crucial medical technology. The waiver will ease complex global rules governing IP and exports, giving governments freedom to collaborate on technology transfers and exports without fearing trade-based retaliation. It will help reduce the dependence on any one country or region for medical products and mitigate the risks of export restrictions (Prabhala and Menghaney 2021).

The argument that vaccines are too complicated for developing countries to manufacture is not only racist, but proven wrong. Kavanagh et al. (2021), a group of medicine-production experts, stated that Biovac and Aspen in South Africa, Institut Pasteur in Senegal, and Vacsera in Egypt could rapidly retool factories to make mRNA vaccines. India's Serum Institute is set to produce the Johnson & Johnson vaccine. Similarly, facilities in many Latin American countries have begun manufacturing vaccine doses under contract to monopoly holders. These existing contracts and several other proposals prove that even lower-income countries do have the capacity to produce COVID-19 vaccines, but are just denied the opportunity based on racism disguised as legal jargon.

Unless the IPR laws are relaxed, by virtue of the TRIPS waiver, and technology transfers can occur, the monopoly holders will continue to maintain absolute control over how much can be produced, what the price is, and where it will be sold. If the waiver is successful, mRNA manufacturing and other vaccines can be dramatically increased under a short period of time (Vanni 2021). It could also help create multiple regional manufacturing hubs which could safeguard the world from future global health catastrophes.

Ultimately, even if the waiver proposal is accepted by WTO's TRIPS Council, it is important to continue investing in public health infrastructure and scientific research. The waiver is a means to an end, rather than an end in itself.

# **Argument 3:** "Existing flexibilities within the TRIPS Agreement are sufficient"

Another popular argument in opposition to the waiver is that existing TRIPS flexibilities, such as compulsory licensing and voluntary licensing, are enough to address the production and distribution issues of COVID-19 vaccines and medicines (Bonadio and Chandler 2021). However, a look into the mechanics of implementing these flexibilities show that they are insufficient and cannot act as a substitute for the TRIPS waiver.

Consider compulsory licensing. A compulsory licence is an authorisation granted by a government to a third party to produce a patented product or process, without the express consent of the patentee (WTO n.d. b). Similarly, the TRIPS Agreement states that there is no need to first try for a voluntary license<sup>6</sup> during

<sup>&</sup>lt;sup>6</sup> Under normal circumstances, the person or company applying for a licence has to try, within a

"natural emergencies", "circumstances of extreme urgency", or "public non-commercial use" (WTO n.d. b). This must not be mistaken for a relaxation of patent rights because patent owners still have rights over the patent. This also means the right to be paid compensation for copies of the products made under the compulsory licence (WTO n.d. b).

Ironically, countries that point to compulsory licensing as an alternative to the TRIPS Waiver have historically undermined its use by developing countries. For example, after filing for a compulsory license in 2007, it took Rwanda 3 years to process the import of generic HIV/AIDS drugs from Canada due to conditions imposed under Canada's TRIPS national regime (Swarns 2001). In another instance, 39 pharmaceuticals sued the Government of South Africa in 1998, when it attempted to break the monopolies of foreign firms on antiretroviral drugs<sup>7</sup> (ibid). Some of the legal battles lasted for over a decade. In 1998, Swiss pharmaceutical giant Novartis filed a lawsuit against India's government to secure monopoly control over its treatment for leukaemia (Abbott 2013). The EU's annual IP enforcement report criticises a number of developing countries for compulsory licensing laws and other uses of TRIPS flexibilities. This kind of pressure continued at the peak of the COVID-19 pandemic in April 2020 (Medecins Sans Frontieres 2020 b).

Pharmaceutical companies also continue to file legal cases against the issuance of compulsory licenses. For example, Gilead recently sued the Russian government for issuing a compulsory license to manufacture Remdesivir, a drug used to treat COVID-19. The Russian Supreme Court ruled against Gilead (Grosheva 2021). Pharmaceutical industry associations also lobbied against the Hungarian government's compulsory license for Remdesivir, as part of their submission to the United States Trade Representative's 'Special 301 Report'. (Knowledge Ecology International 2021).

Developed countries using legal mechanisms and soft power have systematically discouraged the use of compulsory licensing. It is these challenges that the TRIPS waiver seeks to avoid. If approved, TRIPS waiver would provide all countries the space, without fear of retaliation from developed nations, to collaborate with competent developers in research and development, manufacturing, scaling-up, and supply of COVID-19 tools (Vanni 2021).

Even if one optimistically assumes that developed countries will rise to the occasion and encourage compulsory licensing, the tool still remains insufficient. Compulsory licensing was not designed to, and therefore does not effectively function, in a pandemic where medicines and vaccines are protected by multiple forms of IP, as it only addresses patent rights (Public Citizen n.d.).

Let us consider the 'data exclusivity' approach undertaken in the TRIPS agreement. The approach grants the originator exclusive rights over the test data and prevents regulatory authorities from relying on the test data to register generic substitutes. Data exclusivity poses an obstacle to effective use of

reasonable period of time, to negotiate a voluntary licence with the patent holder on reasonable commercial terms. A compulsory licence can be issued only if that fails.

<sup>&</sup>lt;sup>7</sup> Antiretroviral drugs are used to treat HIV patients. While they do not cure HIV, they help keep it under control, so it doesn't severely affect one's health and allow one to lead a normal life.

compulsory licences by delaying the approval of generic products for the duration of the exclusivity period. The other alternative, which is compiling new test data, is time consuming and often unaffordable (WHO 2005).

Further, transfer of technology to licenced producers is not mandatory under compulsory licences. In cases where the precise technology for producing a vaccine is not known, compulsory licensing only works when patent holders are willing to make the technology available to licenced producers. In the case of COVID-19 vaccines, big pharma companies are willing to supply rich countries which already have the privilege of accessing limited vaccine supply. This preference makes smaller markets' access to vaccines an afternoon for big pharma. A global IPR waiver would change those incentives for companies (Ghosh 2021).

Therefore, and unsurprisingly, pharmaceutical companies have made it harder to effectively use compulsory licensing. These corporations have created broader intellectual property thickets of numerous patents, copyrights, industrial design, undisclosed data, and trade secrets protections for COVID-19 technologies; each of which requires a license. For instance, mRNA vaccines<sup>8</sup> include 100-plus key components that may be subject to patents, software copyright protections, algorithms, and undisclosed data protections covering some trade (Wallach 2021). To access this new technology that would aid the fight against the pandemic, smaller markets will have to overcome the aforementioned series of legal blocades.

Even for countries seeking to issue compulsory licences for patents, the 'product-by-product' and 'country-by-country' licensing process is not suited to products relying on complex supply chains. In order to manufacture a generic COVID-19 mRNA vaccine using TRIPS flexibilities, the producer in question would have to seek compulsory licenses for each commodity in its country of manufacture and export, which would further require the compulsory licensing cooperation of the exporting country. Likewise, the producer would have to seek a compulsory license allowing each component's import and vaccine production. Restrictive WTO production-for-export rules make compulsory licensing in a global pandemic context even more complex and unworkable (Public Citizen 2021).

Next, consider voluntary licensing. It refers to the practice where the vaccine or drug developer decides who can license and on what terms to enable manufacturing. However, the pandemic proves that one cannot rely on the benevolence of the pharmaceutical industry to take voluntary action at the pace and scale needed to address the pandemic (WTO n.d. b) .

As of yet, the European Union [EU] has not brought any major pharmaceutical company operating within the union to join WHO's COVID-19 Technology Access Pool [C-TAP]. C-TAP is a platform launched last year to enable the voluntary sharing of IP, data, and knowledge with qualified manufacturers (WHO n.d). No company marketing vaccines has agreed to join the WHO Covid-19 mRNA

<sup>&</sup>lt;sup>8</sup> "mRNA vaccines are a new type of vaccine to protect against infectious diseases. mRNA vaccines teach our cells how to make a protein—or even just a piece of a protein—that triggers an immune response inside our bodies." (Centre for Disease Control and Prevention 2021).

Technology Transfer Hub either (WHO 2021).

Gilead, when Remdesivir was considered a potential treatment, left out half of the global population in its voluntary license strategy, limiting access to the essential medicine. Other major vaccine and therapeutic developers, such as Pfizer/BioNTech and Regeneron, have taken no action to license or transfer technologies to developing country manufacturers (Medecins Sans Frontieres 2021). Pharmaceutical corporations' behaviour thus far shows that relying on their fickle altruism and limited voluntary actions are not enough to tackle a global pandemic.

It is clear that existing TRIPS flexibilities, while welcome, are never fully realised due to in-built mechanisms and pharmaceutical lobbies. One must understand that this is not the shortcoming of the TRIPS Agreement but instead, it's default working design. As Jayati Ghosh (2021) says, the "emancipatory potential" of TRIPS cannot be achieved if it was not created to be emancipatory in the first place.

## **Argument 4:** "The COVAX program is a perfect substitute for the TRIPS Waiver"

COVAX, an initiative co-led by Gavi, the Coalition for Epidemic Preparedness Innovations, and WHO, is a pooled procurement mechanism for COVID-19 vaccine. It aims at vaccine distribution that is equitable and science-led (WHO 2020a). It was hailed as a "global, heroic effort" that would "transcend the limits of human ingenuity" to ensure that vaccine development progressed at "a speed, scale, and access never before seen in human history" (Gavi 2021). However, COVAX currently only aims to vaccinate 20% of the population in developing countries. Herd immunity is reached around 70-80%. The COVAX facility began delivering vaccine doses in late February, but has only been able to deliver 7.1 crore vaccine doses to over 100 countries as of 25 May 2021. The number barely covers 1% of the combined populations of those countries (WHO 2021).

The program's structure involves two distinct phases, the self-financed phase and the aid-financed phase (Berkeley 2020). The former includes high income countries, who were asked to pay for the vaccines upfront by mid-September of 2020. In the aid-financed leg, donor grants through an Advance Market Commitment would finance vaccines for lower-income countries. The latter would allow the poorest 92 countries to receive vaccines for free.

A combination of the self-financing and aid-financed funding streams was anticipated to provide the means to invest in research and development of several promising vaccine candidates. Additionally, as a pooled procurement mechanism, COVAX would have the financial muscle as a buyer to drive down prices for all participants. However, the program was unsuccessful in persuading wealthy countries to invest in large numbers. Instead, high income countries invested in bilateral trade deals that earned them access to a large volume of vaccines, pushing COVAX down the priority list because it did not have the means to compete (Ravelo 2021).

This has left COVAX's managers in a unique predicament. On one hand, not enough self-financing participants joined COVAX to give it the massive buying power it hoped. On the other hand, even though COVAX is desperately short on vaccines, the facility is now contractually obliged to reserve one in five doses for a few rich countries. This means that instead of delivering vaccines to the very poorest of countries who have barely begun inoculation, COVAX has to send vaccines to countries that have already vaccinated a large portion of their populations (Usher 2021).

Therefore, despite its intentions, COVAX contributes to the vaccine inequity that it aims to solve. Additionally, it only applies to procurement and assignment of vaccines while the waiver proposal covers a broader range of health products and technologies required for an effective COVID-19 response including tests, treatments, personal protective equipment, and more (WTO 2020). In light of all its shortcomings, COVAX fails to be a substitute to the TRIPS waiver. A better alternative is to view COVAX as complementary to the waiver. In present times, removing political and legal barriers to sharing life-saving medical technology and know-how will ramp-up production, and ensure that supply shortages are no longer a cause of concern. There will be fewers painful trade-offs with regards to vaccine distribution and the world can inch closer to a pandemic-free world.

### CONCLUSION

Vaccinating the world is not a zero-sum game; everyone comes out of the exercise a winner. Global immunity would significantly lessen the risk of mutation, and hence, that of a variant that could reinfect those vaccinated. Equitable global vaccination is estimated to generate economic benefits of \$466 billion in 10 major economies by 2025 (WHO 2020b). Needless to say, it will also save countless lives.

Vaccine nationalism and capitalism is likely to cause both short-term and long-term damage. In the short run, hoarding vaccines is not only a wasteful exercise, it is also costly. Over the longer run, it will delay economic recovery for all countries and therefore the global economy. While all of the arguments in opposition to the TRIPS Waiver seem benign on face value, it is important to note that all of them seek to maintain the traditional status-quo. This insistence on latching on to the status-quo and unwillingness to carry out even temporary changes belies desperate attempts to preserve power by the richer nations. This power, concentrated within predominantly ex-coloniser countries, has been historically used to exclude, plunder, and colonise. Refusing to relax IPR laws during the pandemic is another example of the same.

The economic reasoning used to oppose the waiver is not only tone-deaf but ignorant of the ground reality in developing countries. The arguments display the sentiment that lives of those in lower to middle income countries are less valuable than those in the global north. More importantly, all anti-waiver rationale is laden with inconsistencies that often go unnoticed in a world where economic concerns are prioritised over human rights. Arguments that rely on such inconsistencies need to be identified, and strongly rejected. The WTO is a good place to start.

### **BIBLIOGRAPHY**

- Abbott, Frederick. (2013). "The Judgment In Novartis v. India: What The Supreme Court Of India Said". *Intellectual Property Watch*, 23 March 2013. Accessed 15 June 2021, https://www.ip-watch.org/2013/04/04/the-judgment-in-novartis-v-india-what-the-supreme-court-of-india-said/.
- Allen, Arthur. (2020). "For Billion-Dollar COVID Vaccines, Basic Government-Funded Science Laid the Groundwork". *Scientific American*, 18 November 2020. Accessed 18 June 2021, https://www.google.com/url?q=https://www.scientificamerican.com/article/for-billion-dollar-covid-vaccines-basic-government-funded-science-laid-the-groundwork/&sa=D&source=editors&ust=1624270440303000&us g=AOvVaw2Xpm8I-sQpm8wsUYzsla9P.
- Beaubien, Jason. (2021). "Price Check: Nations Pay Wildly Different Prices For Vaccines". NPR, 19 February 2021. Accessed 10 June 2021, https://www.npr.org/sections/goatsandsoda/2021/02/19/969529969/price-check-nations-pay-wildly-different-prices-for-vaccines?t=1614153425644 &t=1614181324128.
- Berkeley, Seth. (2021). "COVAX explained". *Gavi the Vaccine Alliance*, 21 January 2021. Accessed 18 June 2021, https://www.gavi.org/vaccineswork/covax-explained.
- Bonadio, Enrico and Dhanay M. Cadillo Chandler. (2021). "Intellectual property and COVID-19 medicines: why a WTO waiver may not be enough". *The Conversation*, 24 February 2021. Accessed 11 June 2021, https://theconversation.com/intellectual-property-and-covid-19-medicines-why-a-wto-waiver-may-not-be-enough-155920.
- Borrell, Joan-Ramon. (2007). "Pricing and patents of HIV/AIDS drugs in developing countries". *Appl Econ.* 39(4): 505–518.
- Bosse, Josselyn, Hyo Yoon Kang and Siva Thambisetty. (2021). "Trips waiver: there's more to the story than vaccine patents". *The Conversation*, 8 May 2021. Accessed 11 June 2021, https://theconversation.com/trips-waiver-theres-more-to-the-story-than-vaccine-patents-160502.
- Chakma, Justin, Hassan Masum, Kumar Perampaladas, Jennifer Heys, and Peter A Singer. (2011). "Indian vaccine innovation: the case of Shantha Biotechnics". *Globalization and health* 7 (9): 1-10.
- Cheney, Catherine. (2021). "Gates Foundation reverses course on COVID-19 vaccine patents." *Devex*, 7 May 2021. Accessed 10 June 2021, https://www.devex.com/news/gates-foundation-reverses-course-on-covid-19-vaccine-patents-99810.

- Clouse, Allie. (2020). "Fact check: Moderna vaccine funded by government spending, with notable private donation". *USA Today*, 24 November 2020. Accessed 18 June 2021, https://www.usatoday.com/story/news/factcheck/2020/11/24/fact-check-donations-research-grants-helped-fund-moderna-vaccine/6398486002/.
- EP News Bureau. (2020). "Gilead signs Voluntary Licensing Agreements with Cipla, Hetero Labs, Jubilant Lifesciences, Mylan for remdesivir". Express Pharma, 13 May 2020. Accessed 16 June 2021, https://www.expresspharma.in/gilead-signs-voluntary-licensing-agreements-with-cipla-hetero-labs-jubilant-lifesciences-mylan-for-remdesivir/.
- Ezell, Stephen. (2021). "Ten Reasons Why a COVID-19 TRIPS IP Waiver Is Unwarranted". *Information Technology and Innovation Foundation*, 9 April 2021. Accessed 12 Jun 2021, https://itif.org/publications/2021/04/09/tenreasons-why-covid-19-trips-ip-waiver-unwarranted.
- Gavi. (n.d). "COVAX Vaccine Roll-Out". Accessed 18 June 2021, https://www.gavi.org/covax-vaccine-roll-out.
- Ghosh, Jayati. (2021). "The political economy of COVID-19 vaccines". *MR Online*, 11 March 2021. Accessed 9 June 2021, https://mronline.org/2021/03/09/the-political-economy-of-covid-19-vaccines/.
- Gill, Indermit and Phillip Schellekens. (2021). "COVID-19 is a developing country pandemic". *Brookings*, 4 June 2021. Accessed 15 June 2021, https://www.brookings.edu/blog/future-development/2021/05/27/covid-19-is-a-developing-country-pandemic/.
- Griffin, Riley and Drew Armstrong. (2020). "Pfizer Vaccine's Funding Came From Berlin, Not Washington". *Bloomberg News*, 10 November 2020. Accessed 16 June 2021, https://www.bloomberg.com/news/articles/2020-11-09/pfizer-vaccine-s-funding-came-from-berlin-not-washington.
- Grosheva, Margarita. (2021). "Supreme Court Rejects Gilead's Claim to Revoke Compulsory Remdesevir License". *Pharmvestnik*, 27 May 2021. Accessed 15 June 2021, https://pharmvestnik.ru/content/news/Verhovnyi-sud-otkazal-Gilead-v-iske-protiv-pravitelstva-po-povodu-prinuditelnoi-licenzii. html.
- Hancock, Jay. (2020). "They Pledged to Donate Rights to Their COVID Vaccine, Then Sold Them to Pharma". *KHN*, 5 August 2020. Accessed 18 June 2021, https://khn.org/news/rather-than-give-away-its-covid-vaccine-oxford-makes-a-deal-with-drugmaker/.
- Heeboll-Nielsen, Anders, and Michael Bech Sommer. (2020). "What patent protection does Gilead's COVID-19 treatment Remdesivir have?" *Lexology*, 30 April 2020. Accessed 16 June 2021, https://www.lexology.com/library/detail.aspx?g=95e02846-73c2-4a71-8b6e-23334a490ace.

- Henney, Megan. (2020). "World Bank president says 'deep' coronavirus recession will hurt world's poorest countries the most". Fox Business, 20 April 2020. Accessed 18 June 2021, https://www.foxbusiness.com/economy/world-bank-president-says-deep-global-recession-will-hurt-poorest-countries-the-most.
- Hooker, Lucy and Daniel Palumbo. (2020). "Covid vaccines: Will drug companies make bumper profits?". *BBC News*, 18 December 2020. Accessed 9 June 2021, https://www.bbc.com/news/business-55170756.
- Human Rights Watch. (2021). Seven Reasons the EU is Wrong to Oppose the TRIPS Waiver. *Human Rights Watch*, 3 June 2021. Accessed 17 June 2021, https://www.hrw.org/news/2021/06/03/seven-reasons-eu-wrong-oppose-trips-waiver.
- Industry Week. (2020). "US Preorders Pfizer Vaccine for \$1.95 Billion." *Industry Week*, 22 July 2020. Accessed 14 June 2021, https://www.industryweek.com/covid19/article/21137271/us-preorders-pfizer-vaccine-for-195-billion.
- Inman, Phillip. (2021). "Drop Covid vaccine patent rules to save lives in poorest countries, UK and Germany told". *The Guardian*, 12 June 2021. Accessed 16 June 2021, https://www.theguardian.com/world/2021/jun/12/drop-covid-vaccine-patent-rules-to-save-lives-in-worlds-poorest-countries-britain-and-germany-told.
- International Chamber of Commerce. (n.d). *The Economic Case for Global Vaccinations*. Paris, France: International Chamber of Commerce.

  Accessed 22 June 2021, https://iccwbo.org/publication/the-economic-casefor-global-vaccinations.
- International Monetary Fund. (2020). "Transcript of Kristalina Georgieva's Participation in the World Health Organization Press Briefing". Accessed 17 June 2021, https://www.imf.org/en/News/Articles/2020/04/03/tr040320-transcript-kristalina-georgieva-participation-world-health-organization-press-briefing.
- Johnson and Johnson. (2020). "Johnson & Johnson Announces Agreement with U.S. Government for 100 Million Doses of Investigational COVID-19 Vaccine". Accessed 18 June 2021, https://www.jnj.com/johnson-johnson-announces-agreement-with-u-s-government-for-100-million-doses-of-investigational-covid-19-vaccine.
- Kavanagh, Matthew, Mara Pillinger, Renu Singh and Katherine Ginsbach. (2021). "To Democratize Vaccine Access, Democratize Production". *Foreign Policy*, 1 March 2021. Accessed 18 June 2021, https://foreignpolicy.com/2021/03/01/to-democratize-vaccine-access-democratize-production/.
- Kerry, Vanessa Bradford and Kelley Lee. (2007). "TRIPS, the Doha declaration and paragraph 6 decision: what are the remaining steps for protecting access to medicines?" *Global Health* 3(1):1-12.

- Knowledge Ecology International. (2021). "Hungarian compulsory license for remdesivir raises a stir with BIO, PhRMA and the US Chamber of Commerce." *Knowledge Ecology International*, 9 March 2021. Accessed 16 June 2021, https://www.keionline.org/35558.
- Médecins Sans Frontières [MSF]. (2020b). *MSF responds to USTR 2020 Special 301 Report.* Geneva, Switzerland: Médicins Sans Frontières. Accessed 15 June 2021, https://msfaccess.org/msf-responds-ustr-2020-special-301-report.
- Médecins Sans Frontières [MSF]. (2020a). "Governments must demand pharma make all COVID-19 vaccine deals public". Accessed 15 June 2021, https://www.msf.org/governments-must-demand-all-coronavirus-covid-19-vaccine-deals-are-made-public
- Médecins Sans Frontières [MSF]. (2021). "Countries' positions on waiving monopolies for Covid-19 medical tools [Map]". *Médecins Sans Frontières*, 9 March 2021. Accessed 22 June 2021, https://www.msf.org/countries-obstructing-covid-19-patent-waiver-must-allow-negotiations.
- Merelli, Annalisa. (2021). "Pfizer's Covid-19 vaccine is set to be one of the most lucrative drugs in the world". *Quartz*, 4 February 2021. Accessed 18 June 2021, https://qz.com/1967638/pfizer-will-make-15-billion-from-covid-19-vaccine-sales/.
- Pooley, James. (2021). "The Big Secret Behind the Proposed TRIPS Waiver". IP Watchdog, 26 May 2021. Accessed 14 June 2021, https://www.ipwatchdog.com/2021/05/25/big-secret-behind-proposed-trips-waiver/id=133905/.
- Prabhala, Achala and Leena Menghaney. (2021). "The world's poorest countries are at India's mercy for vaccines. It's unsustainable". *The Guardian*, 26 April 2021. Accessed 17 June 2021, https://www.theguardian.com/commentisfree/2021/apr/02/india-in-charge-of-developing-world-covid-vaccine-supply-unsustainable.
- Public Citizen. (n.d). "Waiver of the WTO's Intellectual Property Rules (TRIPS): An Indispensable Tool To Fight the Covid-19 Pandemic". *Public Citizen*. Accessed 9 June 2021, https://mkus3lurbh3lbztg254fzode-wpengine. netdna-ssl.com/wp-content/uploads/TRIPS-waiver\_Facts-vs-Common-Myths.pdf.
- Ravelo, Jenny Lei. (2021). "Is COVAX part of the problem or the solution?" Devex,12 March 2021. Accessed 18 June 2021, https://www.devex.com/ news/is-covax-part-of-the-problem-or-the-solution-99334.
- So, Anthony D, & Woo, Joshua. (2020). "Reserving coronavirus disease 2019 vaccines for global access: cross sectional analysis". *BMJ* 371. Accessed 22 June 2021, https://doi.org/10.1136/bmj.m4750.

- Schellekens, Phillip. (2021). "Revealed Vaccine Inequity [Graph]". *Pandem-Ic*, 6 June 2021. Accessed 22 June 2021, https://pandem-ic.com/mortality-trackers/.
- Sen, Amiti. (2021). "WTO members ready for text based negotiations". *Hindu Business Line*, 9 June 2021. Accessed 15 June 2021, https://www.thehindubusinessline.com/news/national/wto-members-ready-for-text-based-negotiations/article34772010.ece.
- Silverman, Ed. (2020). "Roche backpedals on providing liquid for Covid-19 tests in the Netherlands". *STAT*, 28 March 2020. Accessed 16 June 2021, https://www.statnews.com/pharmalot/2020/03/27/roche-covid19-coronavirus-netherlands/.
- Swarns, Rachel. (2001). "DRUG MAKERS DROP SOUTH AFRICA SUIT OVER AIDS MEDICINE". *The New York Times*, 20 April 2001. Accessed 17 June 2021, https://www.nytimes.com/2001/04/20/world/drug-makers-drop-south-africa-suit-over-aids-medicine.html.
- Usher, Ann Danaiya.(2021). "A beautiful idea: how COVAX has fallen short". *The Lancet*, 397(10292): 2322–2325.
- Vanni, Amaka. (2021). "On Intellectual Property Rights, Access to Medicines and Vaccine Imperialism". *TWAIL*, 24 March 2021. Accessed 12 June 2021, https://twailr.com/on-intellectual-property-rights-access-to-medicines-and-vaccine-imperialism/.
- Wallach, Lori. (2021). "The Folly of Vaccine Monopolies". *Friedrich Ebert Stiftung*, 28 April 2021. Accessed 17 June 2021, https://ny.fes.de/article/the-folly-of-vaccine-monopolies.
- World Health Organisation [WHO]. (2005). "Access to Medicines". WHO Drug Information 9(3): 236–241. Accessed 18 June 2021, https://www.who.int/medicines/areas/policy/AccesstoMedicinesIPP.pdf?ua=1.
- World Health Organisation [WHO]. (2020a). "COVAX Announces additional deals to access promising COVID-19 vaccine candidates; plans global rollout starting Q1 2021". Accessed 18 June 2021, https://www.who.int/news/item/18-12-2020-covax-announces-additional-deals-to-access-promising-covid-19-vaccine-candidates-plans-global-rollout-starting-q1-2021.
- World Health Organisation [WHO]. (2020b). "Global equitable access to COVID-19 vaccines estimated to generate economic benefits of at least US\$ 153 billion in 2020–21, and US\$ 466 billion by 2025, in 10 major economies, according to a new report by the Eurasia Group". Accessed 22 June 2021, https://www.who.int/news/item/03-12-2020-global-access-to-covid-19-vaccines-estimated-to-generate-economic-benefits-of-at-least-153-billion-in-2020-21.

- World Health Organisation [WHO]. (n.d). "WHO Covid-19 Technology Access Pool". Accessed 15 June 2021,https://www.who.int/initiatives/covid-19-technology-access-pool.
- World Intellectual Property Organization. (2020). What is intellectual property?. Geneva, Switzerland: World Intellectual Property Organization. Accessed 11 June 2021, https://www.wipo.int/publications/en/details.jsp?id=4528.
- World Trade Organization [WTO]. (n.d. a). "Overview: the TRIPS Agreement." Accessed 15 June 2021, https://www.wto.org/english/tratop\_e/trips\_e/intel2 e.htm.
- World Trade Organization [WTO]. (n.d. b). "Compulsory licensing of pharmaceuticals and TRIPS" Accessed 12 June 2021, https://www.wto.org/english/tratop\_e/trips\_e/public\_health\_faq\_e.htm.
- World Trade Organization [WTO]. (2020). "WAIVER FROM CERTAIN PROVISIONS OF THE TRIPS AGREEMENT FOR THE PREVENTION, CONTAINMENT AND TREATMENT OF COVID-19: COMMUNICATION FROM INDIA AND SOUTH AFRICA". *Geneva, Switzerland: World Trade Organization*. Accessed 16 June 2021, https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/IP/C/W669.pdf&Open=True.
- Centre for Disease Control and Prevention. (2021). "Understanding mRNA COVID-19 Vaccines". Accessed 16 August 2021, https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/mrna.html.
- Halbert, Debora. (2002). "Moralized Discourses: South Africa's Intellectual Property Fight for Access to AIDS Drugs." *Seattle J. Soc. Just.* 1: 257.

