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Promotion and protection of human rights: human rights questions, including alternative approaches for improving the effective enjoyment of human rights and fundamental freedoms

Global vaccine solidarity and human rights in the context of the coronavirus disease (COVID-19) pandemic

Note by the Secretary-General

The Secretary-General has the honour to transmit to the General Assembly the report of the Independent Expert on human rights and international solidarity, Obiora Chinedu Okafor, in accordance with Human Rights Council resolution [44/11](#).

* [A/77/150](#).



Report of the Independent Expert on human rights and international solidarity, Obiora Chinedu Okafor

Summary

The present report is the fifth report prepared for the General Assembly by the Independent Expert on human rights and international solidarity, Obiora Chinedu Okafor. In the report, submitted pursuant to Human Rights Council resolution [44/11](#), the Independent Expert addresses the extent to which global vaccine solidarity, as a component of international human rights solidarity, has or has not been expressed by State actors in the context of the coronavirus disease (COVID-19) pandemic. Following an introduction, the Independent Expert discusses the importance of the deployment of COVID-19 vaccines as a critical response to the pandemic. He then considers the nature of global vaccine solidarity as a human rights imperative and addresses many of the key challenges impeding its fuller realization in the present time. He highlights some examples of positive expressions of global vaccine solidarity by States and other actors and urges a recommitment by all to the significantly higher level of global solidarity that is required to counter the COVID-19 pandemic, while promoting and protecting human rights in fuller measure. He concludes the report by offering a few actionable recommendations.

I. Introduction

1. More than two years after the World Health Organization (WHO) declared the outbreak of the global coronavirus disease (COVID-19) pandemic, the world is still engaged in numerous efforts to minimize its negative impact in the political, social and economic spheres, including on the enjoyment of human rights around the world. Those efforts have been characterized by a certain measure of global and regional cooperation among States, between States and non-State actors and among non-State actors. Such cooperation has included the adoption of bilateral agreements and the establishment of public-private partnerships aimed at vaccine research, development and deployment, in a bid to end the pandemic. Owing to the urgent need for lifesaving COVID-19 vaccines, scientists have worked at unprecedented speeds to develop safe and effective vaccines for all of humanity.¹ However, despite those efforts, there remains a huge gap between the quantity of vaccines that need to be distributed globally and the number that has been provisioned or distributed in response to the pandemic, especially in the global South. The nature and orientation of the global response in the past two years has thus served to highlight pre-existing systemic issues, such as the great disparity between the global North and the global South in access to critical resources for the fuller realization of human rights.

2. In a previous report to the Human Rights Council, the Independent Expert on human rights and international solidarity underscored the negative effects of the hoarding of food exports, vaccines and other COVID-19 control products by a relatively small number of States on the enjoyment of human rights (A/HRC/47/31). The hoarding of vaccines by Western European and North American States – most pronounced in the months immediately following the approval of the first COVID-19 vaccines – has continued to affect access to, and the affordability of, those vaccines for far too many populations in the global South.² The procurement by some States of a sufficient quantity of vaccines to vaccinate their populations multiple times over³ negatively affected access and affordability around the world, in particular for the at-risk populations of other States and the vast majority of the populations of low-income countries.⁴ It is argued that that is one of the contributing factors in the persistence of the COVID-19 pandemic.⁵ Other factors that have limited access to vaccines in a large number of States, in particular those in the low-income and lower-middle-income range, are the internal administrative, logistical, infrastructure and other framework challenges that impede the ability of those States to maximize the use of the vaccines once received.⁶ The allocation of State resources to the storage, transportation and distribution of vaccines, as well as to outreach, to ensure strong uptake of vaccines, has been slower than it should be.⁷

¹ World Health Organization (WHO), “Approved vaccines”, COVID-19 Vaccine Tracker database. Available at <https://covid19.trackvaccines.org/vaccines/approved> (accessed on 23 May 2022).

² Agnes Binagwaho, Kedest Mathewos and Sheila Davis, “Equitable and effective distribution of the COVID-19 vaccines: a scientific and moral obligation”, *International Journal of Health Policy and Management*, vol. 11, No. 2 (February 2022).

³ Yanqui Rachel Zhou, “Vaccine nationalism: contested relationships between COVID-19 and globalization”, *Globalizations*, vol. 19, No. 3 (2022).

⁴ Godwell Nhamo and others, “COVID-19 vaccines and treatments nationalism: challenges for low-income countries and the attainment of the SDGs”, *Global Public Health*, vol. 16, No. 3 (2021).

⁵ Thomas J. Bollyky and Chad P. Bown, “The tragedy of vaccine nationalism: only cooperation can end the pandemic”, *Foreign Affairs*, vol. 99, No. 5 (September/October 2020); James Darwin N. Lagman, “Vaccine nationalism: a predicament in ending the COVID-19 pandemic”, *Journal of Public Health*, vol. 43, No. 2 (June 2021); and Anuradha Gupta, “COVAX can still end COVID-19 vaccine apartheid”, *Nature Human Behaviour*, vol. 6, No. 2 (February 2022).

⁶ Olivier J. Wouters and others, “Challenges in ensuring global access to COVID-19 vaccines: production, affordability, allocation, and deployment”, *The Lancet*, vol. 397, No. 10278 (March 2021).

⁷ WHO and United Nations Children’s Fund (UNICEF), *COVID-19 Vaccination: Supply and Logistics Guidance* (2021).

3. Misinformation and disinformation have posed unique challenges to combating the pandemic. During the seventy-sixth session of the General Assembly, the Secretary-General remarked that the scientific triumph of COVID-19 vaccines had been undone by “the tragedy of political will, selfishness and mistrust”.⁸ As fake news spread more easily than the virus, the Director General of WHO remarked at the fifty-sixth Munich Security Conference, held in 2020, that it was not simply a matter of fighting a pandemic but of fighting an “infodemic”.⁹ That widespread problem has, in some quarters, been used to justify the inequality of vaccine distribution as one that exists between richer and poorer States. However, the disinformation ecosystem is a global issue that has caused deaths even in high-income States.¹⁰ A key challenge to combating the pervasive disinformation on COVID-19 is the benefit of monetizing disinformation, which amounts to nearly a quarter of a billion dollars annually.¹¹ A study conducted in 2021 by the Global Disinformation Index shows that, in just eight months during that year, \$12 million in advertising had funded Spanish-language disinformation sites.¹²

4. In order to put the pandemic behind us, WHO has set a vaccination target of 70 per cent population coverage in every country by mid-2022.¹³ However, significantly intensified action by States and other actors is necessary to meet that goal. This will involve not only State-to-State cooperation and interregional collaboration, but also dynamic cross-sectoral and multi-actor global solidarity targeted to the sole objective of bridging the inequalities causing the persistence of the pandemic. Most importantly, rather than having these efforts be nationally based, much greater global solidarity is required to finally bring an end to the pandemic and, consequently, stem the erosion of human rights that it has engendered around the world.

5. International solidarity is a fundamental and fundamentally important principle of international law,¹⁴ and one that would be established as a human right upon the adoption of the draft declaration on human rights and international solidarity. The expression of international human rights solidarity, including on a global level, helps to create an enabling environment for the prevention of significant inequities and the development of a just international order for all. In the present report on global vaccine solidarity in the context of the COVID-19 pandemic, attention is drawn to the imperative for States to take measures that express and advance such solidarity so as to better safeguard and realize human rights for everyone around the world.

6. The present report is divided into four parts. In section II, a brief overview is provided of global COVID-19 vaccination efforts and the impact that the vaccine has

⁸ United Nations Regional Information Centre for Western Europe, “COVID-19: UN Secretary-General says the world has failed an ethics test”, 21 September 2021.

⁹ Tedros Adhanom Ghebreyesus, Director-General of WHO, remarks during the Munich security conference, 15 February 2020.

¹⁰ See Leonardo Bursztyrn and others, *Misinformation During a Pandemic*, NBER Working Paper, No. 27417 (National Bureau of Economic Research, 2020).

¹¹ Global Disinformation Index, “The quarter billion dollar question: how is disinformation gaming ad tech?”, September 2019.

¹² Free Press, “New research reveals Google benefitted from placing ads on Spanish-language COVID-19 disinformation websites”, 3 November 2021.

¹³ WHO, “Achieving 70% COVID-19 immunization coverage by mid-2022”, 23 December 2021.

¹⁴ See R. St. J. MacDonald, “Solidarity in the practice and discourse of public international law”, *Pace International Law Review*, vol. 8, No. 2 (Spring 1996); Bruno Simma, “From bilateralism to community interest in international law”, vol. 250, in *Collected Courses of the Hague Academy of International Law* (1994); Rüdiger Wolfrum and Chie Kojima, eds., *Solidarity: A Structural Principle of International Law* (Berlin, Springer, 2010); and Obiora Chinedu Okafor, “The future of international solidarity in global refugee protection”, *Human Rights Review*, vol. 22, No. 1 (March 2021).

had on ending the current pandemic. In section III, the Independent Expert covers the human rights imperative for global vaccine solidarity during the pandemic. In section IV he discusses the challenges impeding the realization of global vaccine solidarity during the pandemic and that therefore negatively affect the enjoyment of human rights at the present time, are discussed. In section V, he presents some examples of positive expressions of global vaccine solidarity as a component of international human rights solidarity. The Independent Expert concludes his report with some actionable recommendations.

II. COVID-19 vaccines as a critical response to the pandemic

7. By May 2022, WHO had recorded more than 521 million cases of COVID-19 infections and over 6 million deaths globally.¹⁵ As at 20 May 2022, the following 11 vaccines had been authorized under the WHO Emergency Use Listing procedure: Covavax (Serum Institute of India), Nuvaxovid (Novavax), Spikevax (Moderna Biotech), Comirnaty (Pfizer-BioNTech), Convidecia (CanSino Biologics), Janssen (Johnson & Johnson), Vaxzevria (Oxford-AstraZeneca), Covishield (Oxford-AstraZeneca formulation, Serum Institute of India), Covaxin (Bharat Biotech), Covilo (Sinopharm) and CoronaVac (Sinovac).¹⁶ As the world endeavours to bring an end the pandemic and curb its devastation, the inadequacy of global vaccine solidarity has hampered the realization of that goal. Following approval of their use by WHO in December 2020, a few wealthy States, mainly from North America and Western Europe, scrambled to acquire and take delivery of even more early doses of Pfizer, Moderna and other vaccines than they had pre-booked, leaving most States in Africa, Latin America and other regions in the global South with no choice but to wait until much later that year, or even until March 2021, to acquire doses of the approved vaccines.¹⁷ Grossly inadequate quantities of those doses were eventually secured by States in the global South through various initiatives, including the COVID-19 Vaccine Global Access (COVAX) Facility, which was established to accelerate vaccine production and to ensure equitable access for all States worldwide.¹⁸

8. In addition to hoarding by wealthy States, resource limitations and structural inequalities have hampered access to COVID-19 vaccines in most States in the global South, especially in the low-income and lower-middle-income countries.¹⁹ Those challenges also contributed to the slow roll-out of the vaccines at a time when the world needed to take swift action to minimize the immensely negative global economic, political and social impacts of the virus, including on the enjoyment of many human rights. For instance, when the first round of vaccines arrived in many

¹⁵ WHO, WHO Coronavirus (COVID-19) Dashboard, available at <https://covid19.who.int/> (accessed on 22 May 2022).

¹⁶ WHO, “11 vaccines granted emergency use listing (EUL) by WHO”, COVID-19 Vaccine Tracker database. Available at <https://covid19.trackvaccines.org/agency/who/> (accessed on 22 May 2022).

¹⁷ See Ewen Callaway, “The unequal scramble for coronavirus vaccines”, *Nature*, vol. 584 (August 2020), Lancet Commission on COVID-19 Vaccines and Therapeutics Task Force Members, “Operation warp speed: implications for global vaccine security”, *The Lancet: Global Health*, vol. 9, No. 7 (July 2021); and Boniface Chimpango, “Vaccine nationalism and equitable access to COVID-19 pharmaceuticals: TRIPS Agreement under trial (again)”, *Journal of International Trade Law and Policy*, vol. 20, No. 3 (2021).

¹⁸ See www.gavi.org/covax-facility.

¹⁹ See Nivedita Saksena, “Global justice and the COVID-19 vaccine: limitations of the public goods framework”, *Global Public Health*, vol. 16, Nos. 8–9 (2021); Lisa Bowleg, “We’re not all in this together: on COVID-19, intersectionality, and structural inequality”, *American Journal of Public Health*, vol. 110, No. 7 (July 2020); and Håvard Thorsen Rydland and others, “The radically unequal distribution of COVID-19 vaccinations: a predictable yet avoidable symptom of the fundamental causes of inequality”, *Humanities and Social Sciences Communications*, vol. 9, No. 61 (2022).

African States in March 2021, very few of those States were able to administer all the acquired doses to their citizens before the vaccine expiry dates were reached. This was due, in part, to limitations in the availability of the specialized human and financial resources needed to conduct extensive vaccine drives (other challenges are discussed below).²⁰ Despite those challenges, global vaccination statistics as at 17 May 2022 indicate that more than 12 billion vaccine doses had been administered, with approximately 61 per cent of the world's population having received a full dose.²¹ This means, however, that around 39 per cent of the population is yet to be fully vaccinated. Further analysis indicates that, as at 16 May 2022, of those 12 billion doses administered globally, only about 502 million, or around 4.1 per cent, had been administered in Africa – yet Africans account for nearly 17 per cent of the total world population.²²

9. Shifting the focus to international trade and production linkages, it is estimated that, with only 50 per cent of the people in countries with emerging markets and developing economies vaccinated by early 2022, the global economic cost could be as high as \$3.8 trillion.²³ It is further indicated that 49 per cent of those costs would be borne by high-income States.²⁴ That burden occurs even if high-income States are effective in vaccinating their populations and containing the pandemic within their borders. This exemplifies the reality of an inexorably and deeply interlinked world, where people travel, economies rely heavily on international exchanges and goods constantly move across borders. Whether in the global North or the global South, States and their citizens want a return to a degree of normalcy in the wake of the pandemic. The aforementioned negative economic impact of vaccine hoarding and lack of equitable global access shows how discrimination, intolerance and fear can propel the world towards a dystopian future.

10. It is also important to underscore that, as long as borders remain open for international travel and trade, however much high-income States may ramp up vaccination of their own populations, the COVID-19 virus will continue to mutate and move from one part of the globe to another. Ending the pandemic through widespread vaccination is possible, however, through much greater international solidarity, in order to facilitate equitable access to the vaccine for most of the world's population regardless of geographical location.²⁵

III. Global vaccine solidarity as a human rights imperative

11. The COVID-19 pandemic has left almost no one untouched. For some time to come, humanity will continue to live with its negative psychosocial and other

²⁰ WHO Regional Office for Africa, "Risks and challenges in Africa's COVID-19 vaccine rollout", 14 May 2021.

²¹ WHO, WHO Coronavirus (COVID-19) Dashboard, available at <https://covid19.who.int/> (accessed on 22 May 2022); and Our World in Data, Coronavirus (COVID-19) Vaccinations database, available at <https://ourworldindata.org/covid-vaccinations> (accessed on 22 May 2022).

²² WHO Regional Office for Africa, Africa: COVID-19 Vaccination dashboard, available at <https://app.powerbi.com/view?r=eyJrIjojOTI0ZDlhZWVtMjUxMC00ZDhhLWFjOTYtYjZlMGYzOWI4NGIwIiwidCI6ImY2MTBjMGI3LWJkMjQtNGlzMOS04MTBiLTNkYzI4MGFmYjU5MCI9ImMiOjh9> (accessed on 22 May 2022); and WHO Regional Office for Africa, "Africa needs to ramp up COVID-19 vaccination six-fold", 3 February 2022.

²³ Cem Çakmaklı and others, "Economic costs of inequitable vaccine distribution across the world", Voxeu, 15 February 2021.

²⁴ Ibid.

²⁵ Obiora Chinedu Okafor, "Solidarity key to post COVID-19 response", Open Global Rights, 28 April 2020.

impacts.²⁶ The high number of deaths caused by the virus, intense pressure exerted on health care systems and on a range of essential services and workers and forced lockdown and quarantine measures left many jobless or without a livelihood. The pandemic and many of the measures put in place around the world to control it have had a considerable negative impact on the rights to life, health, liberty, education, freedom of movement and work, among other human rights. Although great efforts have been made to respect, protect and fulfil human rights during the pandemic (through such measures as the turn to remote work, the granting of furlough pay and the provision of financial assistance to businesses), the enjoyment and realization of many of those fundamental human rights has been markedly suboptimal since its onset. For States and populations already riven by pre-existing inequalities, the pandemic exacerbated the vulnerabilities of such societies to negative social, political and economic impacts.²⁷ Thus, the fuller enjoyment of certain human rights on the global scale will continue to be unrealized, at least for some time to come, largely because of the global disparity that exists among the vaccine “have” and “have-not” regions of the world. Yet, as a top diplomat has observed, the pandemic will not end for anyone, until it ends for everyone.²⁸

12. Furthermore, the ongoing failure to ensure optimal global vaccine solidarity is clearly contrary to the values of international solidarity, a concept that is defined in the draft declaration on the right to international solidarity as “the expression of a spirit of unity among individuals, people, States and international organizations, encompassing the union of interests, purposes and actions and the recognition of different needs and rights to achieve common goals” (A/HRC/35/35, annex). This gap in global solidarity clearly demonstrates and underscores the grossly inadequate unity of purpose and action among States, peoples and individuals around the world in providing optimal global access to COVID-19 vaccines. The gap thus violates the letter and spirit of the international cooperation (and therefore solidarity) requirement in the human rights sphere that is constitutionally embodied in Articles 55 and 56 of the Charter of the United Nations.

13. Global vaccine solidarity as a human rights imperative is discussed, albeit briefly, in the present section in terms of: (a) the general obligation to protect, in part through the instrumentality of global solidarity, the human rights of everyone in the global community; and (b) the imperative on all States, especially those most endowed, to fulfil their (minimum core) obligations under the International Covenant on Economic, Social and Cultural Rights, not only to their own citizens but also to everyone around the world.

14. First, the near-constant emergence of COVID-19 variants, some of which have turned out to be either more virulent or infectious than those identified previously,

²⁶ See Dalila Talevi and others, “Mental health outcomes of the COVID-19 pandemic”, *Rivista di Psichiatria*, vol. 55, No. 3 (2020); A.K. Verma and Sadguru Prakash, “Impact of COVID-19 on environment and society”, *Journal of Global Biosciences*, vol. 9, No. 5 (2020); Rasheeta Chandler and others, “The impact of COVID-19 among black women: evaluating perspectives and sources of information”, *Ethnicity and Health*, vol. 26, No. 1 (2021); and Vijay Shankar Balakrishnan, “Impact of COVID-19 on migrants and refugees”, *The Lancet: Infectious Diseases*, vol. 21, No. 8 (August 2021).

²⁷ Xiao Tan, Rennie Lee and Leah Ruppner, “Profiling racial prejudice during COVID-19: who exhibits anti-Asian sentiment in Australia and the United States?”, *Australian Journal of Social Issues*, vol. 56, No. 4 (December 2021); Maila D.H. Rahiem, “COVID-19 and the surge of child marriages: a phenomenon in Nusa Tenggara Barat, Indonesia”, *Child Abuse and Neglect*, vol. 118, No. 105168 (August 2021); and United Nations, “Policy brief: impact of COVID-19 on women”, 9 April 2020.

²⁸ Obiora Chinedu Okafor, “COVID-19 vaccines should be shared much more equitably, in solidarity, around the world”, *Toronto Star*, 12 January 2021; and Samantha Power, “This won’t end for anyone until it ends for everyone”, *The New York Times*, 7 April 2020.

underscores the urgency of implementing a global maximum vaccination strategy to prevent the emergence of more dangerous variants of concern.²⁹ While many wealthy States have commendably contributed large sums of money to the COVAX Facility, they have also undermined its effectiveness, as well as the overall effort to end the pandemic as rapidly as possible for everyone, by simultaneously engaging in vaccine nationalism.³⁰ The international human rights law framework under which States are required to respect (i.e. refrain from interfering in the enjoyment of), protect (i.e. prevent others from interfering in the enjoyment of) and fulfil (i.e. adopt appropriate measures towards the full realization of) rights is generally instructive with regard to the imperative of global vaccine solidarity.³¹ More importantly, for the present purposes, under Articles 55 and 56 of the Charter, all States Members of the United Nations are required to cooperate, (in global solidarity) to give effect to all internationally accepted human rights, including those protected under the International Covenant on Economic, Social and Cultural Rights. Even more specifically, in accordance with article 2 (1) of the International Covenant, all States parties are obligated, both individually and through international assistance and cooperation, to take steps to realize all the rights protected thereunder.³² This obligation is also implied in article 28 of the Universal Declaration of Human Rights, which many now view as part of customary international law. On a regional level, article 27 (1) of the African Charter on Human and Peoples' Rights goes so far as to impose on all individuals similar duties towards the international community. Through all of the aforementioned provisions, basic obligations are imposed on all States parties to those instruments to aid in the realization of human rights beyond their own borders.

15. The nature of global vaccine solidarity as a human rights imperative is also underscored, not only by a discussion of the basic obligations imposed on all States parties under the International Covenant on Economic, Social and Cultural Rights, but also by stressing that, in addition, all States parties have minimum core obligations under that treaty to the populations of other countries. This position has been firmly established in the jurisprudence of the Committee on Economic, Social and Cultural Rights, the expert body charged with interpreting the International Covenant. That jurisprudence therefore applies to all economic, social and cultural rights protected under the Covenant, including its article 12, on the right to health, and article 15 (b), on the right to enjoy the benefits of scientific progress, which are only two among many rights adversely affected by the lack of optimal vaccine solidarity in the past few years. In that regard, the Committee emphasized that it was “particularly incumbent on States parties and other actors in a position to assist” to provide international assistance and cooperation, especially economic and technical, to enable developing countries to fulfil their “core and other obligations” under the

²⁹ Jamie M. Caldwell and others, “Vaccines and variants: modelling insights into emerging issues in COVID-19 epidemiology”, *Paediatric Respiratory Reviews*, vol. 39 (September 2021); and John S. Tregoning and others, “Progress of the COVID-19 vaccine effort: viruses, vaccines and variants versus efficacy, effectiveness and escape”, *Nature Review Immunology*, vol. 21 (October 2021).

³⁰ See Rogier W. Sanders and Menno D. de Jong, “Pandemic moves and countermoves: vaccines and viral variants”, *The Lancet*, vol. 397, No. 10282 (April 2021); and Okafor, “COVID-19 vaccines should be shared much more equitably”.

³¹ Gabor Rona and Lauren Aarons, “State responsibility to respect, protect and fulfil human rights obligations in cyberspace”, *Journal of National Security Law and Policy*, vol. 8, No. 3 (2016); David Jason Karp, “What is the responsibility to respect human rights? Reconsidering the ‘respect, protect, and fulfil’ framework”, *International Theory*, vol. 12, No. 1 (2019); Ida Elisabeth Koch, “Dichotomies, trichotomies or waves of duties?”, *Human Rights Law Review*, vol. 5, No. 1 (2005); and Convention on the Elimination of All Forms of Discrimination against Women.

³² See also Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights (2011); and Olivier De Schutter and others, “Commentary to the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights”, *Human Rights Quarterly*, vol. 34 (2012).

Covenant, including obligations of contemporary priority, such as the immunization of their populations against major diseases such as COVID-19.³³ It is on the basis of such international human rights obligations that all States are enjoined to respect, and aid in the protection and fulfilment of the enjoyment of, the right to health in other States.³⁴ Given the aforementioned obligation on all States to take steps to realize economic, social and cultural rights under article 2 (1) of the Covenant, including through international solidarity, the Committee has further indicated that, in order to comply with their international obligations in relation to article 12, States parties must both respect the enjoyment of the right to health in other countries and prevent third parties from violating that right in other countries.³⁵ It is therefore not possible for a State party to fulfil its minimum obligation to ensure the highest attainable standard of health nationally without due consideration of the realization of the rights to health of the populations of other States and third parties.

IV. Challenges to the greater realization of global vaccine solidarity in aid of the fuller enjoyment of human rights

16. The primary aim of the COVAX Facility, which is one of the global mechanisms and processes initiated to address vaccine inequality, is achieving equitable vaccine access. Other mechanisms and processes include licensing and sharing mechanisms, such as the COVID-19 Technology Access Pool of WHO, the messenger RNA (mRNA) technology transfer hub in South Africa and the proposal to waive certain intellectual property rights on COVID-19 vaccines and related treatments otherwise protected under the Agreement on Trade-Related Aspects of Intellectual Property. While there are benefits and weaknesses of those interventions, the primary focus is on the greater realization of global vaccine solidarity in aid of the fuller enjoyment of human rights. Therefore, the present analysis, while highlighting the global mechanisms and processes, is focused on four themes presenting challenges to the fuller enjoyment of human rights: (a) development and production; (b) affordability; (c) equitable allocation and distribution; and (d) State preparedness, deployment of vaccines and vaccine uptake.

A. Development and production

17. The development and production of some COVID-19 vaccines within one year of the onset of the pandemic was a great scientific achievement.³⁶ Since then, however, efforts by manufacturing companies to produce sufficient doses of the vaccines to help immunize the vast majority of the world's population has been laden with challenges, such as access to raw materials, laboratory facilities, dedicated trained personnel and vaccine distribution, which have led to difficulty in meeting demand.³⁷ Despite those challenges, global vaccine production was at nearly 1.5 billion doses per month by October 2021.³⁸ The International Federation of Pharmaceutical Manufacturers and Associations reported that in 2021, 11.2 billion

³³ Committee on Economic, Social and Cultural Rights, general comment No. 14 (2000) on the right to the highest attainable standard of health, paras. 43–45.

³⁴ *Ibid.*, para. 39.

³⁵ *Ibid.*

³⁶ Jon Cohen, “Shots of hope”, *Science*, vol. 370, No. 6523 (December 2020).

³⁷ Rebecca Forman and others, “COVID-19 vaccine challenges: what have we learned so far and what remains to be done?”, *Health Policy*, vol. 125, No. 5 (May 2021); and Fatima Amanat and Florian Krammer, “SARS-CoV-2 vaccines: status report”, *Immunity*, vol. 52, No. 4 (April 2020).

³⁸ WHO, “WHO, UN set out steps to meet world COVID vaccination targets”, 7 October 2021.

COVID-19 vaccine doses had been produced.³⁹ That means that there should have been sufficient supply to meet the key WHO vaccination target, which was to have 70 per cent of the global population of about 7.9 billion vaccinated by mid-2022 (excluding booster shots).⁴⁰ WHO has provided a detailed strategy of actions that include establishing new dose-sharing commitments, allowing the free cross-border flow of finished vaccines and raw materials and ensuring full transparency on monthly production.⁴¹

18. A further challenge with regard to development and production relates to intellectual property rights held with regard to COVID-19 vaccines and related treatments. In October 2020, two States proposed to the World Trade Organization (WTO) that the intellectual property rights on COVID-19 vaccines and related treatments be suspended to enable the global scale-up of production.⁴² Specifically, the submitters of the proposal sought a minimum three-year waiver on such intellectual property rights, covering diagnostics, vaccines, medical devices, personal protective equipment and other tools to prevent, treat and contain COVID-19.⁴³ By May 2021, the proposal had the formal support of 62 WTO members, mostly from the global South, and more than 100 of the 164 WTO members reportedly supported the waiver in principle.⁴⁴ In April 2021, in a reversal of the position previously taken by the United States of America, the country's President, Joe Biden, signalled support for the proposal.⁴⁵ In March 2022, a compromise agreement was reached among the European Union, India, South Africa and the United States (the "Quad outcome document"), but a decision by all WTO members on the agreement has yet to be announced.⁴⁶ On 3 May 2022, WTO circulated a draft proposal, which its Director General had helped to facilitate, but, as at the time of writing the present report, no multilateral agreement on that proposal had yet been reached.⁴⁷ At the meeting of the General Council of WTO on the Agreement on Trade-Related Aspects of Intellectual Property, held on 10 May 2022, many members indicated that they needed more time before they could engage in substantive discussions regarding the proposal.⁴⁸

19. Regarding vaccine development, in June 2021, WHO supported the launch of a technology hub in South Africa to use publicly available information to recreate Moderna's vaccine and to teach companies and scientists across the continent how to use mRNA technology.⁴⁹ In October of the same year, both Moderna and BioNTech announced their own initiatives. Moderna announced that it would invest up to \$500 million to build a "state-of-the-art mRNA facility in Africa with the goal of

³⁹ International Federation of Pharmaceutical Manufacturers and Associations, "11 billion COVID-19 vaccines produced in 2021 has resulted in the biggest immunization campaign in human history and 2022 will require more and better vaccine redistribution and innovation", 16 December 2021.

⁴⁰ WHO, "WHO, UN set out steps to meet world COVID vaccination targets".

⁴¹ WHO, "Strategy to achieve global COVID-19 vaccination by mid-2022", 2021.

⁴² World Trade Organization (WTO), "Members discuss intellectual property response to the COVID-19 pandemic", 20 October 2020.

⁴³ WTO, "Waiver from certain provisions of the TRIPS agreement for the prevention, containment and treatment of COVID-19", 25 May 2021, document IP/C/W/669/Rev.1.

⁴⁴ Philip Loft, "Waiving intellectual property rights for COVID-19 vaccines", House of Commons Library Research Briefing, No. 9417 (2022).

⁴⁵ Joe Biden, President of the United States of America, statement made at the White House on the Omicron COVID-19 variant, 26 November 2021.

⁴⁶ Loft, "Waiving intellectual property rights for COVID-19 vaccines".

⁴⁷ WTO, document IP/C/W/688.

⁴⁸ WTO, "Members welcome Quad document as basis for text-based negotiations on pandemic IP response", 10 May 2022.

⁴⁹ See www.who.int/initiatives/the-mrna-vaccine-technology-transfer-hub.

producing up to 500 million doses” every year,⁵⁰ and BioNTech announced that it would be building mRNA facilities in Rwanda and Senegal to produce 50 million doses per year, once fully operational, by mid-2022.⁵¹ In January 2022, Afrigen Biologics and Vaccines, which is part of a consortium seeking to develop and manufacture the mRNA vaccine in South Africa, successfully reproduced the full Moderna vaccine, and it is hoped that clinical trials will begin in November 2022.⁵² Despite such commendable progress, a WHO coordinator has noted that the clinical trials process could have taken just one year, but will likely take three years without the help of the pharmaceutical companies.⁵³ This is one of the remaining development and production challenges facing solidarity-driven efforts to ensure much greater COVID-19 vaccine production, and thus much greater availability, on the African continent and in many parts of the global South.

20. Another development and production challenge facing many States relates to export bans. As a preliminary point, it is important to note that most of the leading vaccines, such as those produced by Pfizer and Moderna, are manufactured in Europe and North America. However, AstraZeneca produces many doses in Asia and South America, and Johnson & Johnson manufactures vaccines in India and South Africa.⁵⁴ According to WHO, there are fewer than 10 African manufacturers that produce vaccines; most pack and label doses rather than manufacture them.⁵⁵ Consequently, Africa imports an estimated 99 per cent of its vaccines and consumes 25 per cent of the global supply.⁵⁶ When a few States hold this kind of monopoly, it means that any export restrictions imposed by them are likely to have a considerable negative impact on many other States, if not on the entire world.⁵⁷ In 2021, the impact of an export ban imposed by a major State of the global South was felt around the world, but especially by lower-middle-income countries that had been expecting vaccine shipments from one of the largest vaccine manufacturers in the world.⁵⁸ The export ban, which has now been lifted, had been imposed at a time when that State was experiencing its worst surge of the COVID-19 virus and was engaged in a desperate campaign to vaccinate its own population to curb the outbreak.⁵⁹ Other States relying on the COVAX Facility for vaccine supplies were greatly affected during the ban, as the Facility’s main supplier of AstraZeneca vaccine is based in the State that had imposed it. As a result, many of those States were forced to delay administering the second dose of the vaccine to their populations by several weeks as they sought alternative sources, which were largely inaccessible owing to the high cost of vaccines.⁶⁰ Many vaccination drives and programmes also had to be postponed. In instances where advance plans had been made, the postponement of vaccination

⁵⁰ Business Wire, “Moderna to build state-of-the-art mRNA facility in Africa to manufacture up to 500 million doses per year”, 7 October 2021.

⁵¹ BioNTech, “BioNTech plans to initiate the construction of an mRNA vaccine manufacturing facility in Africa in mid-2022”, 26 October 2021.

⁵² Madlen Davies, “COVID-19: WHO efforts to bring vaccine manufacturing to Africa are undermined by the drug industry, documents show”, *The BMJ*, vol. 376 (2022).

⁵³ Ibid.

⁵⁴ Loft, “Waiving intellectual property rights for COVID-19 vaccines”.

⁵⁵ WHO Regional Office for Africa, “What is Africa’s vaccine production capacity?”, 19 March 2021.

⁵⁶ Linda Geddes, “Why Africa needs to manufacture its own vaccines”, Gavi, 19 July 2021.

⁵⁷ Ralf Peters and Divya Prabhakar, “Export restrictions do not help fight COVID-19”, United Nations Conference on Trade and Development, 11 June 2021.

⁵⁸ Andrew Jeong, “India’s COVID wave is receding. Now the world wants it to get back to exporting vaccines”, *The Washington Post*, 14 September 2021.

⁵⁹ Ibid.

⁶⁰ African States, including Ghana, Kenya and Uganda, had to seek out alternative sources during the export ban imposed by India. See Cai Nebe, “Africa scrambles as India vaccine export ban bites region”, *Deutsche Welle*, 4 May 2021.

drives had direct financial implications for the affected States.⁶¹ Similar export restrictions were imposed by States in the global North. In one region, companies were required to receive authorization before exporting COVID-19 vaccine doses. The consequence of that export ban was that any State in the region had the authority to stop a shipment of COVID-19 vaccines, a move that not only supported, but also triggered, threats to block shipments to a host of other States.⁶² Although the impact of export bans tends to be global, already vulnerable low-income and lower-middle-income countries are hit hardest, thereby limiting their access to vaccines even more and, in turn, prolonging the journey towards the eradication of the pandemic. While the prioritization of its population by a State is quite understandable, given local political pressures on Governments to deliver public goods to their immediate constituents, this does not completely absolve States from their duties to cooperate, including in terms of vaccine solidarity, under international human rights law.

B. Affordability

21. It has been found that some pharmaceutical companies are charging between 6 and 24 times the cost of production of their vaccines.⁶³ The COVAX Facility is, on the average, paying up to five times more than the cost of production for vaccine doses, while wealthy States are paying even more exorbitant prices to acquire the same doses.⁶⁴ States with the resources to pay more for vaccines set a benchmark for pricing, making it difficult for other States with less purchasing power to compete. The pre-existing situation, wherein there was a failure by States (mostly in the global North) to ensure optimal accountability and transparency in the conduct of the affairs of transnational corporations, including the large pharmaceutical corporations, has meant that far too many pharmaceutical corporations have been “free to prioritize the most lucrative high-volume, high-priced contracts with rich States, at the direct expense of protecting more lives in more States”.⁶⁵ And not only do States with less purchasing power have to pay prices that are far out of their reach, but they must also wait longer for their orders to be filled.⁶⁶

22. Globally, even poor States have had to divert national resources from other very important budget lines to respond to the pandemic and to the urgent need to secure vaccines for their citizens. However, while States in the global North have, in a large number of cases, had to divert resources originally set aside for humanitarian crises or aid, far too many States in the global South have had to divert resources set aside for essential socioeconomic needs.⁶⁷ The gains made towards bridging the inequality gap in many of the latter States, especially in terms of the enjoyment of socioeconomic rights, such as the rights to education, to water and sanitation and to

⁶¹ Ibid.

⁶² Simon J. Evenett, “Export controls on COVID-19 vaccines: has the EU opened Pandora’s box?”, *Journal of World Trade*, vol. 55, No. 3 (June 2021).

⁶³ Knowledge Network on Innovation and Access, COVID-19 Vaccine Access database, available at www.knowledgeportal.org/covid19-vaccine-arrangements (accessed on 23 May 2022); and Anna Marriott and Alex Maitland, “The great vaccine robbery”, The People’s Vaccine Policy Brief, 29 July 2021.

⁶⁴ Oxfam International, “Vaccine monopolies make cost of vaccinating the world against COVID at least 5 times more expensive than it could be”, 29 July 2021.

⁶⁵ Marriott and Maitland, “The great vaccine robbery”.

⁶⁶ Organisation for Economic Co-operation and Development (OECD), “Access to COVID-19 vaccines: global approaches in a global crisis”, 18 March 2021; and OECD Development Assistance Committee, joint statement on the COVID-19 global pandemic, 9 April 2020.

⁶⁷ Julie Seghers, *Whatever It Takes: A Rapid and Massive Increase in Aid is Needed to Save Millions of Lives and Bring Our Divided World Together amid the Coronavirus Pandemic* (Oxford, United Kingdom of Great Britain and Northern Ireland, Oxfam International, 2020).

food, have been either reversed or halted owing to the excess costs imposed on those poorer States by the excessively high cost of the vaccines. It is likely that the practice of optimal global vaccine solidarity would have significantly eased the impact of the very high costs of vaccines on States of the Global South.

23. Compared with the European Union and the United States paying around \$19 per dose, and one State even paying \$30 for each unit, the African Union negotiated the lowest price for the Pfizer-BioNTech vaccine.⁶⁸ However, it is important to note that that negotiated a rate was still six times higher than Pfizer's production cost.⁶⁹ In addition, some poorer States paid what they thought were low rates, only to discover that they had still paid much more than the richest States.⁷⁰ For example, Uganda and South Africa purchased AstraZeneca vaccines for more than \$5 per dose, while the European Commission paid only \$3.50 per dose for the same vaccine.⁷¹ Companies have only recently begun to disclose the rates at which they are offering vaccines to various States, and the high secrecy that tended to prevail during the negotiation of purchase agreements put poorer States at a disadvantage as they were not – and still tend not to be – able to negotiate more favourable prices, including in relation to global North States.⁷² The high prices of vaccines will continue to be a burden on far too many States around the world, especially the low-income and lower-middle-income countries, which have had to either divert essential and scarce resources to address the pandemic or rely on aid to be able to procure urgently needed vaccines for their populations.⁷³

24. Alongside affordability, there is also the issue of vaccine efficacy and access thereto. As at 20 May 2022, there were 11 WHO-approved vaccines that varied in efficacy, both against the original COVID-19 virus and against the Delta and Omicron variants. Against the original strain of the virus, the Pfizer-BioNTech vaccine has an efficacy rate of about 95.0 per cent; Moderna, 94.5 per cent; Johnson & Johnson, 72.0 per cent; Oxford-AstraZeneca, 70.0 per cent; Sinopharm, 79.0 per cent; Sputnik, 91.4 per cent; Novavax, 90.4 per cent; and Sinovac, ranging between 50.0 per cent and 91.2 per cent, depending on the clinical trial.⁷⁴ Pfizer and Moderna are priced much higher than the other options available. AstraZeneca and Johnson & Johnson, although slightly less effective, present more affordable options, especially for States in the global South, which tend to struggle to meet the high costs of providing vaccines to their populations. While some States are at liberty to select vaccines based on efficacy, for others, any vaccine is better than none at all. Many States in the global South have had to resort to mixing vaccines owing to shortage issues, but studies and trials have showed promising results from mixing vaccines and, as a result, both developing and developed States have been taking the mix-and-match approach.⁷⁵ Furthermore, the efficacy of the vaccines varies in the weeks after the shot is administered.⁷⁶ Although the Omicron variant is relatively new, early figures associated with the variant show that protection against hospitalization after two

⁶⁸ Marriott and Maitland, "The great vaccine robbery".

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ Forman and others, "COVID-19 vaccine challenges".

⁷² Javier Guzmanet and others, "COVID-19 vaccines pricing policy options for low-income and middle-income countries", *BMJ Global Health*, vol. 6, No. 3 (2021).

⁷³ Seghers, *Whatever It Takes*.

⁷⁴ Mark Terry, "Comparing COVID-19 vaccines: timelines, types and prices", Bio Space, 14 December 2021; and WHO, "The Sinopharm COVID-19 vaccine: what you need to know", May 2021.

⁷⁵ Ronak Rashedi and others, "COVID-19 vaccines mix-and-match: the concept, the efficacy, and the doubts", *Journal of Medical Virology*, vol. 94, No. 4 (April 2022).

⁷⁶ Nick Andrews and others, "COVID-19 vaccine effectiveness against the Omicron (B.1.1.529) variant", *New England Journal of Medicine*, vol. 38, No. 16 (April 2022).

doses of any vaccine is rated at 25–35 per cent, but rises significantly to 90 per cent after a Pfizer booster shot and to 90–95 per cent following a Moderna booster shot.⁷⁷

C. Equitable allocation and distribution

25. The share of COVID-19 vaccines given out by country or continent shows stark global vaccine imbalance. As at 25 October 2021, China, which has 18.3 per cent of the world’s population, had been served 32.7 per cent of its COVID-19 vaccine doses; India, with 17.7 per cent of the population, had 14.8 per cent of the doses; the European Union, with 5.7 per cent of the population, had 8.5 per cent; South America with 5.5 per cent of the population, had 7.3 per cent; the United States, with 4.2 per cent of the population, had 6 per cent; and Africa, with 17.4 per cent of the population, had a mere 2.7 per cent.⁷⁸ The population of Africa continues to be grossly underserved, with only 4.1 per cent of its people having received vaccines as at 22 May 2022.⁷⁹

26. High-income States paying excessive amounts to secure vaccine supplies (mostly) for their national use have also created a significant allocation and distribution equity challenge for other, generally lower-income, States.⁸⁰ This challenge especially affects low-income and lower-middle-income countries, as well as the COVAX Facility, as they must compete for access to the available aggregate supply. From the perspective of fostering the rapid end of the pandemic, continued national hoarding of vaccines is untenable,⁸¹ especially with the low vaccination rates in lower-middle-income countries and with emerging virulent and/or highly infectious variants. The Facility does not have the mandate to compel States to purchase vaccines through its programmes. High-income States can therefore choose, and mostly have chosen, to go straight to vaccine manufacturers to secure their own doses. By February 2021, some 62 States or blocs had signed agreements directly with manufacturers and not through the Facility.⁸² For example, in January of that year, the African Union announced that it had secured 270 million doses from manufacturers for Member States, in an effort to supplement those procured from the COVAX Facility.⁸³ Unfortunately, several States, mostly from the global South, have had no choice but to wait for the Facility to supply them vaccine doses, owing to its subsidized rates, and have therefore had to endure long delays in supply and distribution.⁸⁴

D. State preparedness, deployment of vaccines and vaccine uptake

27. Efforts have been made, including by many States in the global North, to provide financial assistance and support for vaccination coverage in low-income and lower-middle-income countries. However, some of the external financial assistance

⁷⁷ United Kingdom, Health Security Agency, “How well do vaccines protect against Omicron? What the data shows”, blog, 10 February 2022.

⁷⁸ Katharina Buchholz, “The global vaccine imbalance”, Statista, 26 October 2021.

⁷⁹ WHO Regional Office for Africa, Africa: COVID-19 Vaccination dashboard.

⁸⁰ Wouters and others, “Challenges in ensuring global access”.

⁸¹ Denise N. Obinna, “Solidarity across borders: a pragmatic need for global COVID-19 vaccine equity”, *The International Journal of Health Planning and Management*, vol. 37, No. 1 (January 2022); Ingrid T. Katz and others, “From vaccine nationalism to vaccine equity: finding a path forward”, *New England Journal of Medicine*, vol. 384, No. 14 (April 2021); and Sriram Shamasunder and others, “COVID-19 reveals weak health systems by design: why we must remake global health in this historic moment”, *Global Public Health*, vol. 14, No. 7 (2020).

⁸² Wouters and others, “Challenges in ensuring global access”.

⁸³ Olivia Kumwenda-Mtambo, “African Union secures 270 million COVID-19 vaccine doses from manufacturers”, Reuters, 14 January 2021.

⁸⁴ Gavi, “World leaders launch call for renewed support for vaccination in 2022 as part of the global fight against COVID-19”, January 2022.

provided has been designated for the purchase of commodities and technical assistance, not for in-country preparedness and the expenses necessary to ensure the effective deployment of vaccine doses within the poorer States that have received such assistance. Delivery costs have been a significant challenge in the deployment of vaccines to local populations in the global South. This includes the cost of fridges for vaccine storage, expenses for vaccinators, transport, fuel for refrigerated delivery trucks, the training of health workers and the implementation of communication and awareness campaigns.⁸⁵ WHO indicates that delivery costs for all low-income to middle-income countries, excluding India, to reach 70 per cent of their populations by mid-2022 are estimated to be \$8 billion.⁸⁶ However, the United Nations Children's Fund indicates that those delivery costs may have been underestimated, as the estimates were not adjusted for geographical inaccessibility, fragile and humanitarian settings, vaccine hesitancy or other implementation-related expenses.⁸⁷

28. On both preparedness and deployment, the Gavi Alliance has also noted that donated vaccines often do not come with sufficient notice to the recipient for proper planning.⁸⁸ While donations are welcome and appreciated, mutual respect and consideration, along with due regard for the receiving State, should inform all efforts. States require notification well in advance if they are to adequately utilize donated vaccine doses. Receiving COVID-19 vaccines with a short shelf life, coupled with insufficient preparation time, means that some States have been dealing with wastage at a time when manufacturers are working hard to meet global demand.⁸⁹ The issue of preparedness is especially salient in the case of Pfizer and Moderna vaccines, which must be administered within a certain timeframe of being taken out of required storage temperatures. Other challenges recorded by States worldwide include staffing shortages, insufficient vaccine doses, misinformation and disinformation leading to vaccine hesitancy and challenges in vaccinating members of certain population groups (such as those who are immobile and unable to leave their homes). To succeed in global vaccination efforts, further support beyond provision of vaccines is required, in particular for low-income and lower-middle-income countries.

29. While vaccine hesitancy is not unique to the COVID-19 pandemic, its impact has been felt globally through the persistence of the pandemic and a large-scale death toll, in particular among the unvaccinated.⁹⁰ A survey conducted to measure vaccine acceptance in 32 States revealed that those with the highest hesitancy rates in the study were not all lower-middle-income countries. According to the survey, France and Serbia had a 44 per cent and 38 per cent hesitancy rate, respectively.⁹¹ On several occasions, WHO has stated that, even though the vaccine development process has been quick, no short cuts were taken on safety and clinical standards.⁹² Despite those

⁸⁵ United Nations, "How can we vaccinate the world? Five challenges facing the UN-backed COVAX programme", 5 April 2021.

⁸⁶ Ulla Griffiths and others, *Costs and Predicted Financing Gap to Deliver COVID-19 Vaccines in 133 Low-And Middle Income States* (New York, UNICEF, 2022).

⁸⁷ Ibid.

⁸⁸ African Union and others, joint statement on dose donations of COVID-19 vaccines to African countries, 29 November 2021.

⁸⁹ Al Jazeera, "Nigeria destroys more than 1 million expired COVID-19 vaccines", 22 December 2021.

⁹⁰ As at 19 December 2021, Switzerland had a 16.19 per cent death rate for unvaccinated people, as compared with a 1.72 per cent death rate for persons that were fully vaccinated against COVID-19. In the United States, the death rate for unvaccinated people as at 11 of December was at 11.26 per cent, as compared with a 0.98 per cent death rate for persons that were fully vaccinated. As at 12 December, Chile had a death rate of 5.59 per cent for unvaccinated people, as compared with a death rate of 1.58 per cent for fully vaccinated people. See Edouard Mathieu and Max Roser, "How do death rates from COVID-19 differ between people who are vaccinated and those who are not?", *Our World in Data*, 23 November 2021.

⁹¹ Wouters and others, "Challenges in ensuring global access".

⁹² WHO, "Coronavirus disease (COVID-19): vaccine research and development", 10 August 2021.

assurances, global vaccine hesitancy rates remain significant. There is a breakdown in public trust enabling the propelling of false and misinformed theories on (COVID-19) vaccines and their effects.⁹³ Owing to limited time and resources, Governments – especially those of low-income and lower-middle-income countries – have been unable to fully implement communication strategies to build optimal public trust in COVID-19 vaccines.⁹⁴ WHO has urged States to manage the ensuing infodemic by disseminating accurate information, based on science and evidence, on the COVID-19 pandemic.⁹⁵

V. Positive expressions of global vaccine solidarity in aid of the fuller realization of human rights

30. The Independent Expert has previously highlighted positive expressions of international solidarity, whereby States have come together or taken individual action to address vaccine inequality (A/HRC/47/31). Despite the challenges faced in the realization of global vaccine solidarity in aid of the fuller realization of human rights, commendable efforts to bridge the vaccine gap continue. Many COVID-19 vaccine donations have been made through multilateral initiatives such as the COVAX Facility, bilateral agreements between States, public and private partnerships and regional cooperation. To date, of the 12 billion doses of COVID-19 vaccines needed to vaccinate at least 20 per cent of the world population, the COVAX initiative has secured 2.8 billion doses through funded agreements and funded donations.⁹⁶ This includes the additional pledge of 870 million new doses to be donated by the States of the Group of Seven (G7), with the aim of delivering at least half of those new doses by the end of 2021.⁹⁷ By 4 February 2022, 500 million doses had been donated to 105 States through the Facility.⁹⁸ Although the G7 donation has been criticized for not even coming close to meeting the huge demand for the vaccines, the recognition of the need by the G7 States and the decision to donate vaccine doses is an important step in the right direction. As at 23 March 2022, the Facility had shipped 286.3 million doses donated by the European Union, 29.7 million doses donated by the United Kingdom of Great Britain and Northern Ireland and 237.6 million donated by the United States to recipient countries.⁹⁹ Those acts of global vaccine solidarity contributed to the effort to end the pandemic and, thus, to better safeguarding human rights for all.

31. What is more, of the 2.8 billion doses received as at 4 February 2022 by the COVAX Facility, 1.1 billion doses had been shipped through the Facility to 144 States, mostly to lower-middle-income countries.¹⁰⁰ Through bilateral agreements, States such as China, the Russian Federation, the United Kingdom and the United States have donated COVID-19 vaccines to many low-income and lower-middle-

⁹³ London School of Hygiene and Tropical Medicine, “From production to pricing: can the world meet COVID-19 vaccination challenges?”, 12 February 2021.

⁹⁴ Bernadette Hyland-Wood and others, “Toward effective government communication strategies in the era of COVID-19”, *Humanities and Social Sciences Communications*, vol. 8, No. 30 (2021).

⁹⁵ WHO, “Managing the COVID-19 infodemic: promoting healthy behaviours and mitigating the harm from misinformation and disinformation – joint statement by WHO, UN, UNICEF, UNDP, UNESCO, UNAIDS, ITU, Global Pulse and IFRC”, 23 September 2020.

⁹⁶ Gavi, *Breaking COVID Now: The Gavi COVAX AMC Investment Opportunity* (2022).

⁹⁷ WHO, “G7 announces pledges of 870 million COVID-19 vaccine doses, of which at least half to be delivered by the end of 2021”, 13 June 2021.

⁹⁸ Gavi, “COVAX crosses milestone of 500 million donated doses shipped to 105 countries”, 4 February 2022.

⁹⁹ Our World in Data, “COVID-19 vaccine doses donated to COVAX”, Coronavirus (COVID-19) database. Available at <https://ourworldindata.org/grapher/covax-donations?country=European+Union~USA~GBR> (accessed on 28 May 2022).

¹⁰⁰ Gavi, “COVAX crosses milestone of 500 million”.

income countries.¹⁰¹ Such bilateral agreements also included the direct donation of vaccines by vaccine manufacturers to Botswana, Rwanda, Myanmar and the African Union, among many others.¹⁰² The private sector has also been supportive, to some extent, through public-private partnerships. Examples include the distribution of vaccines by mPharma in Ghana,¹⁰³ the supply of 500 million doses to developing States by Pfizer and BioNTech through the United States,¹⁰⁴ the partnership between Aspen Pharmacare and the World Bank to fund and purchase up to 400 million doses for the African Vaccine Acquisition Task Team¹⁰⁵ and other private distribution entities offering similar support to low-income countries.¹⁰⁶

32. Regional organizations have, to date, taken both internal and external action to supply and ensure local uptake of vaccines. With regard to internal efforts made by the European Union, about 70 per cent of its population has received at least two doses of the vaccine.¹⁰⁷ With respect to its external efforts, the European Union recently supported an initiative to promote the local uptake of vaccination in 12 African States.¹⁰⁸ Furthermore, the African Union has received and redistributed 90 million vaccines through the COVAX Facility, and millions more through bilateral agreements. However, those figures fall far short of the number of doses needed to realize the critical WHO projection of vaccinating at least 70 per cent of the African population.¹⁰⁹ This points to a need for much more global and regional solidarity to close the wide North-South inequality gap with respect to access to COVID-19 vaccines.

33. The mRNA training in, and technology transfer to, six African States (Egypt, Kenya, Nigeria, Senegal, South Africa and Tunisia), as announced by WHO, is also a positive expression of international human rights solidarity in the area of vaccine access.¹¹⁰ This is a welcome initiative that reinforces what should be a robust global commitment to bring about a rapid end to the pandemic. The announcement by

¹⁰¹ In July 2021, the United Kingdom had pledged to donate 100 million vaccines by June 2022, 80 million of which were to go directly to COVAX for distribution. As at September 2021, the United States had donated 140 million doses to at least 93 States. In November 2021, China pledged to donate 1 billion doses to Africa. Also in 2021, the Russian Federation donated 80,000 vaccine doses to the Philippines. See United Kingdom, Foreign, Commonwealth and Development Affairs, “UK begins donating millions of COVID-19 vaccines overseas”, 28 July 2021; KFF, “Tracking U.S. COVID-19 vaccine donations”, 22 September 2021; Grady McGregor, “Biden says Omicron demands that countries share vaccines as China donates 1 billion doses to Africa”, *Fortune*, 30 November 2021; and Meghan Murphy, “Russia’s new frontier in Southeast Asia: vaccine diplomacy”, Centre for Strategic and International Studies, 21 September 2021.

¹⁰² United States, Embassy in Botswana, “The United States donates 100,620 doses of Pfizer vaccine to Botswana”, 18 November 2021; United States, Embassy in Rwanda, “US gives Rwanda nearly 2 million COVID-19 vaccine doses in total”, 27 November 2021; African Union and others, “Joint statement on dose donations”; and UNICEF, COVID-19 Vaccine Market dashboard, available at www.unicef.org/supply/covid-19-vaccine-market-dashboard (accessed on 23 February 2022).

¹⁰³ David Clarke and others, “Mobilizing the private sector for an equal and rapid COVID-19 vaccine rollout”, blog, 4 May 2021.

¹⁰⁴ Pfizer, “Pfizer and BioNTech to provide 500 million doses of COVID-19 vaccine to U.S. Government for donation to poorest nations”, 10 June 2021.

¹⁰⁵ David Malpass, President of the World Bank Group, remarks to the media on World Bank Group action on COVID-19 vaccines for developing states, 30 June 2021.

¹⁰⁶ Centre for Strategic and International Studies, “Beyond COVAX: the importance of public-private partnerships for COVID-19 vaccine delivery to developing countries”, September 2021.

¹⁰⁷ European Centre for Disease Prevention and Control, COVID-19 Vaccine Tracker database, available at <https://vaccinetracker.ecdc.europa.eu/public/extensions/COVID-19/vaccine-tracker.html#uptake-tab> (accessed on 26 January 2022).

¹⁰⁸ UNICEF, “European Union provides fresh funding to support COVID-19 vaccination in sub-Saharan Africa”, 7 December 2021.

¹⁰⁹ African Union and others, joint statement on dose donations.

¹¹⁰ WHO, “WHO announces first technology recipients of mRNA vaccine hub with strong support from African and European partners”, 18 February 2022.

Moderna that it is developing a manufacturing facility in Kenya, with the intention of addressing the vaccine manufacturing gap in the region, is another positive example,¹¹¹ as is its announcement of a commitment not to enforce its patents for 92 lower-middle-income countries in the areas covered by the Gavi COVAX Advance Market Commitment.¹¹² In addition, on 16 February 2022, BioNTech announced plans to ship mobile vaccine factory containers to Africa,¹¹³ and on 25 May, Pfizer announced that it would offer low-cost vaccination to 45 lower-income States.¹¹⁴ These are also positive examples.

VI. Conclusion and recommendations

34. **In the present report, the Independent Expert emphasizes the important role of States in realizing vaccine solidarity in the context of the current pandemic, a role that directly affects the enjoyment of human rights, or the lack thereof. The Independent Expert also highlights the deep interconnectedness and interdependence of humanity, the existing international legal obligations to express international human rights solidarity in the present regard and the resulting human rights imperative for vaccine solidarity. Furthermore, the Independent Expert discusses the challenges impeding the realization of vaccine solidarity and stresses the imperative for States and other actors to join in full support of international solidarity to ensure the realization of optimal global equity in the enjoyment of access to COVID-19 vaccines and the resulting human rights. He notes, nevertheless, that certain actions taken by various States, multilateral agencies and private sector actors since the development of COVID-19 vaccines demonstrate the modest but still significant progress made towards attaining the goal of vaccine solidarity as a human rights imperative. He concludes that the fuller expression of global vaccine solidarity remains extremely important for the advancement of human rights in the present time.**

35. **The Independent Expert recommends that States and other relevant actors:**

(a) **Urgently develop legislative and/or administrative solutions to end the monetization of COVID-19 disinformation that has eroded trust in COVID-19 vaccines and stripped social cohesion, leading to far too many avoidable deaths, among other harms;**

(b) **Commit to refraining from taking any measures (such as export bans) that impose a disproportionately negative impact on equitable access to COVID-19 vaccines around the world. Whenever imposed, such measures should be fully and transparently justified within the limits permitted by international human rights law;**

(c) **Prioritize the proactive coordination, support and reinforcement of WHO-led global vaccine solidarity initiatives, such as the COVAX Facility and the Access to COVID-19 Tools (ACT) Accelerator umbrella programme to fast-track equitable access to COVID-19 vaccines around the world, while ensuring**

¹¹¹ David Richard Walwyn, “How drug companies are sidestepping the WHO’s technology transfer hub in Africa”, *The Conversation*, 13 March 2022.

¹¹² Sara Jerving, “Moderna’s first African mRNA vaccine facility will be in Kenya”, *Devex*, 7 March 2022.

¹¹³ BioNTech, “BioNTech introduces first modular mRNA manufacturing facility to promote scalable vaccine production in Africa”, 16 February 2022.

¹¹⁴ Pfizer, “Pfizer launches ‘An Accord for a Healthier World’ to improve health equity for 1.2 billion people living in 45 lower-income countries”, 25 May 2022.

that effectiveness, efficiency and other implementation concerns are urgently addressed;

(d) Extend their fullest support to the proposal currently before WTO to allow all States that are able, especially lower-income countries, to manufacture and use already-developed COVID-19 vaccines without being subjected to the disciplines, restrictions and limitations imposed by that Organization's intellectual property law regime.
