**COMPULSORY LICENSING PRACTICES OF COVID-19 VACCINE PRODUCTION IN INDONESIA**

**Bayu Sujadmiko1\*, Desi Churul Aini2, Asep Sukohar3, Dimas Zakaria4**

Faculty of Law, Universitas Lampung1,2,4

Faculty of Medical, Universitas Lampung3

*bayu.sujadmiko@fh.unila.ac.id1\*, desi.churul@fh.unila.ac.id2 , asep.sukohar@fk.unila.ac.id3, dimas.zakaria@student.unila.ac.id4*

**Abstract**

The COVID-19 pandemic, which is increasingly spreading throughout the world, including Indonesia, seems to require the procurement of vaccines to suppress the spread of the virus that is increasingly out of control. The procurement of the vaccine itself will face the interests of the owner of the invention. In the Doha Declaration's provisions, in an emergency such as the COVID-19 pandemic like this, a compulsory license is allowed to get access to cheap vaccines. However, it becomes a question of how this cheap vaccine price can still be accessed by Indonesia, which is the question that is the aim of this research. The research method used in this research is a qualitative method with legal and socio-legal approaches that focus on policies and regulations. Social, economic, and political perspectives are used in this study as an analysis tool. The EFAS and IFAS methods are used to find strategies for the Indonesian state in utilizing the principle of compulsory licensing. This study found that the Indonesian government could have access to cheap vaccines during this pandemic based on the Doha Declaration's provisions. Even for post-pandemic conditions, Indonesia can get access to cheap vaccines because Indonesia is a country with technological capabilities that are still below other developed countries. This study concludes that all countries can obtain compulsory licenses for affordable vaccine prices, but post-pandemic conditions, only countries with underdeveloped technology capabilities and developing countries can have them.

***Keywords:*** *Compulsory Licensing, COVID-19’s Vaccine, Strategy*

**1. INTRODUCTION**

At the end of 2019, the world was shocked by discovering a new type of virus in Wuhan City, Hubei Province, China.[1]Corona virus 2 (SARS-CoV-2) was announced by ICTV on February 11, 2020, to name this virus. On the same date, the name COVID-19[2] The WHO officially named this disease.[3] The spread that tends to be comfortable and prone to older people to get serious diseases is a world concern.[4] This concern then became real when the disease was finally declared a pandemic by the WHO on March 11, 2020, after affecting 215 countries in the world.[5] A total of 33,206,004 people in the world have contracted this virus as of September 29, 2020.[6]

In Indonesia, this virus began to develop on March 2, 2020, when the Indonesian government announced two positive patients COVID-19.[7]After this incident, the number of people infected increased every day. As of June 30, Indonesia's total population is 268,583,016 people.[8] Of these, as of September 29, 2020, 282,724 people have been infected with this disease, of which 10,601 people have died.[9] That means that every three people out of 100 Indonesians who have been affected by this pandemic cannot be saved. This kind of condition makes this pandemic must be resolved as soon as possible. One way to overcome this is through vaccine production. There are 172 countries recorded discussing the possibility of participating in COVAX[10]. This effort is made to create fair world conditions for countries to receive safe and effective vaccines once licensed and approved.[11]

Vaccine development is indeed a humanitarian action in ending an epidemic of disease, but it cannot be denied that in a vaccine, there is the work of the brain which has an intellectual property value in it.[12] As intellectual property, it should be, the vaccine needs to have protection.[13] The protection that can be given to a vaccine can be done by registering a patent.[14] The exclusive rights owned by the patent owner as property rights seem to give the owner monopoly rights for a certain period[15] the significant research and development (R&D) costs of the manufacturing process of vaccines and other modern medicines within twenty years must be guaranteed to be covered.[16] This is what makes the price of patent drugs costly, even as stated by the Health Action International survey; there are several types of patent drugs in the world, one of which is the Ciprofloxacin originator, a price equivalent to ten days' income in several countries.[17] Whereas health is the right of every human being, therefore without health, a person is conditionally unequal, and without health, someone else will not be able to obtain other rights.[18]Even Article 25 of the Universal Declaration of Human Rights (UDHR) itself regulates the importance of each individual's health. In the national regulations, the importance of health has also been regulated in the 1945 Constitution of the Republic of Indonesia, to be precise in Article 28H.

The narratives about access to cheap drugs that the international community continues to blow out from day to day have encouraged WTO member countries' awareness to make specific regulations related to flexibility in the TRIPs rules. In the provisions of Article 7 of the TRIPs agreement, it is implied that the public interest which pays attention to the balance between producers of technological knowledge and users of technology through an emphasis on protection and enforcement of IPRs must be carried out so that it can support social and economic welfare. In 2001, to be precise, in Doha, Qatar followed up on this to produce a Declaration on the TRIPs Agreement and Public Health to confirm and detail the flexibility of TRIPs.[19]

The WTO has made exceptions to the import ban against diseases that are harmful to health. Patents were specifically ignored at the September 2001 Doha meeting for drugs such as tuberculosis, malaria, and AIDS.[20] This provision provides an opportunity for foreign drug patents in developing countries to reduce prices to save a person's life.[21] There is a particular reason for compulsory licensing according to Article 31 (b) TRIPs, namely, for the benefit of the community such as the urgent need of a country or other extreme conditions or the interests of the community whose use is not for commercial use.[22]

To stop the spread of COVID-19 in Indonesia, the presence of this provision will later make the price of the vaccine for COVID-19 affordable in Indonesia. However, it is feared that this price will become expensive again when the world conditions are free from the COVID-19 pandemic. So this becomes a question for researchers to explore further about low price rights and the principle of compulsory licensing. The purposes of study are examine indonesian strategies to utilize the principle of compulsory licensing on covid 19 vaccine production in Indonesia.

**2. RESEARCH METHODOLOGY**

The research method used in this research is a qualitative method with a legal and socio-legal approach that focuses on legal policies and legislation and uses social, economic, and political perspectives as analysis tools. Data management is carried out comprehensively using the EFAS and IFAS methods to find strategies for the Indonesian state in utilizing the principle of compulsory licensing.

**3. RESULTS AND DISCUSSIONS**

**a. The patent of Covid 19’s Patent**

Of the 268,583,016 inhabitants of Indonesia recorded as of June 30, 2020.[23] As many as 282,724 people have been infected with the COVID-19 disease in Indonesia as of September 29, 2020, and this number continues to grow every day.[24] Judging from the world's total distribution, Indonesia is one of the countries with the most extensive distribution. Even now, Indonesia has surpassed China.[25] This number makes the Indonesian Doctors Association (IDI) anxious and worried that Indonesia would become the centre of COVID-19 in the world. Moreover, the discipline of the Indonesian people who often neglect the implementation of the COVID-19 health protocol.[26]Indonesia's highest COVID-19 transmission rate currently occurs in the DKI Jakarta area, which is 68,927 cases. As of September 25, 2020, 2,871 patients are currently treated.[27] This number has made the COVID-19 referral hospital in Jakarta reach its maximum limit.[28] The spike in cases per day that has become increasingly out of control in Jakarta in the past few days has made Governor Anies Baswedan pull the emergency brake to tighten the implementation of the PSBB in DKI Jakarta.[29]

Jakarta's PSBB tightening poses a threat to creating a recession for the Indonesian state to become increasingly real.[30] This is because Jakarta's economic activity, which reaches seventeen to eighteen percent of the Indonesian economy, will stop.[31] The imminent recession will result in rising food prices and inflation and increasing unemployment in Indonesia.[32] Another urgency of procuring the COVID-19 vaccine in Indonesia can also be seen from sports tourism. The Formula E event, scheduled to be held in June in Jakarta, must be cancelled considering the COVID-19 pandemic situation in Indonesia, which has not improved.[33] This year also the domestic football event, both league one and league 2, there is still no clarity after the police did not permit the crowd.[34] The end of this pandemic needs to be hastened considering that in 2021 there are at least two world-class sports events to be held in Indonesia, namely the U-20 World Cup, which will be held in six cities in Indonesia, and the 2021 MotoGP event, which will be held at the Mandalika Circuit, Lombok, Nusa West Southeast.[35][36] If the above events fail to occur, many losses will be suffered, especially when the tourism sector and the Indonesian economy are experiencing a disruption amid this pandemic.[37]

During a pandemic that is still spreading, the Central Government has decided that the 2020 Pilkada will continue to be implemented in the middle of the pandemic.[38] The implementation of the Pilkada in the middle of this pandemic has made several parties express their concern because this will make the number of positive cases of COVID-19 in Indonesia increase.[39]Especially, for example, the implementation of the Sabah Election, which was held in the COVID-19 pandemic, has resulted in a surge in positive cases of COVID-19 in Malaysia.[40] If Indonesia must also experience this spike in cases because of the 2020 Pilkada, this will further reinforce the urgency of the COVID-19 vaccine.

In the Non-Aligned Movement meeting, which was attended by around 40 countries and the Director-General of WHO and the Secretary-General of the United Nations, President Joko Widodo said that the COVID-19 vaccines and medicines must be accessible to people in developing countries.[41] The President's statement is very reasonable, considering that patented drugs' prices are generally relatively high.[42] It is estimated that the patent drug discovery process's costs can reach 900 million to 1.8 billion US dollars.[43]

Even though Indonesia is no longer a developing country, according to USTR, Indonesia's exports to global have exceeded 0.5 percent. Indonesia is also part of the G-20 organization. It has a high average Indonesian economic growth of around 5 percent. However, according to Aviliani as a Senior Economist at the Institute for Development of Economics and Finance, if you look at the Gross National Income, Indonesia is not yet a developed country. The World Bank has determined 12,000 US dollars as the first criterion for a country to be considered a developed country. This figure is still very far away from Indonesia.[44] Based on the latest report from the World Bank, Indonesia's GNI per capita is the only US $ 4,050, only placing Indonesia as an upper-middle-income country. It should also be noted that the amount of GNI per capita in Indonesia is only slightly adrift of the minimum threshold for a country to be categorized as upper middle income, which is the US $ 4,046.[45]

From a science and technology perspective, western countries are more profitable in making vaccine drugs for COVID-19. For example, several countries such as China and Russia have claimed that they have succeeded in finding this COVID-19 vaccine drug.[46] Even China itself already has the world's first patented COVID vaccine after local authorities approved the patent application.[47] This vaccine has been patented as a warning for Indonesia to anticipate high vaccine prices.

**b. Prinsip *Compulsory licensing***

*The Declaration on the TRIPS Agreement and Public Health*, which was held in November 2001, has recognized and allowed compulsory licensing effectively for member countries that do not have sufficient technological or pharmaceutical capabilities under the TRIPS Agreement.[48]Initially, compulsory licensing grants the competent government authority to license the use of a patented invention to third parties or government agencies without permission from the patent holder. This provision confirms that WTO members can use compulsory licensing flexibility[49] Previously, in the provisions of Article 31F of the TRIPs agreement, it was stated that pharmaceutical products based on a compulsory license were only for the domestic needs of that country so that the production capacity that was not better than developing countries forced them to be in a dilemma in the availability of certain drugs.[50]To ensure continuity of increased production and supply of patented technology, according to the provisions of the Doha Declaration, compulsory licensing can be effectively enforced for patent holders to license their inventions to one or more third parties in other countries. The purpose of compulsory licensing itself is as a legal mechanism to increase access to patented inventions whose availability does not exist in the market.[51]

Some requirements for granting a compulsory license have been set out in article 31 of the TRIPs Agreement. The determination on a case-by-case basis also includes the need to demonstrate previous unsuccessful negotiations with patent owners for voluntary licenses and the payment of adequate remuneration to patent holders. Compulsory licensing can also be granted to provide handling in national emergencies or other very urgent situations to speed up the process of specific requirements being revoked, such as the need to negotiate beforehand to obtain a voluntary license from the patent holder: emergency and anti-competitive practices which are the reasons referred to in this agreement for issuing compulsory licenses. The Doha Declaration states that prevention is not justified in the TRIPs Agreement against members who seek to protect their public health. Affirmation that the TRIPs Agreement's commitments must be interpreted and implemented to support the rights of WTO members to promote access to medicines to protect public health.[52]This gives Members complete freedom to determine other reasons, such as those related to public health or the public interest, or non-functioning patents. Each member has the right to grant a compulsory license, and the freedom to determine the basis for granting such a license is stated in the Doha Declaration.

This compulsory license permits the government to license the use of an invention patented to a government agency or third party without an agreement with the patent owner if an agreement is not found from the negotiations carried out.[53]Implementing compulsory licensing and freedom in determining the basis for implementing the license is every member's right. National emergency or other urgent circumstances can be determined independently by each country, including those related to dangerous infectious diseases.[54] The affirmation of the commitment that developed countries will provide incentives for any transfer of technology provided by companies or institutions to developing and underdeveloped countries have been stated in the Doha Declaration's provisions.[55] Thus, this provision will make it easier for developing countries to obtain affordable prices for the supply of drugs imported from other countries.[56]

**c. Indonesia's Strategy on Vaccinne Production**

The state interest, which is manifested in an international relationship, is the meaning of foreign policy.[57]As a sovereign international subject, Indonesia also conducts foreign policy with other countries and non-state international subjects. The foreign policy used by the Indonesian state is a free and active foreign policy that promotes.[58]To deal with the problem of COVID-19, which is increasingly spreading in Indonesia, one form of international relations carried out by Indonesia is to collaborate with WHO as a health institution. Besides, the Official Development Assistance (ODA) mechanism is also encouraged to hope that affordable vaccine prices are cheaper.[59]

In order to strive for easy access, safety, and affordability of vaccine prices, one of the efforts made by the government is one of which is achieved through *WHO Access to COVID-19 Tools (ACT) Accelerator COVAX Facility*. Gavi, CEPI, and WHO is the coalition that leads to COVAX. COVAX itself has a goal of accelerating the development and manufacture of the COVID-10 vaccine and ensuring that every country in the world has access to vaccines that are fair and equitable.[60] The goal is to accelerate the development and manufacture of the COVID-19 vaccine, and ensure fair and equitable access for every country in the world.

This effort has been carried out after COVID-19 was declared a pandemic, as stated by Retno Marsudi as Minister of Foreign Affairs of the Republic of Indonesia, that Indonesia has established active cooperation internationally and multilaterally. At the COVAX Facility, Indonesia is included in the Advanced Market Commitment (AMC) category. By joining the COVAX Facility, Indonesia will guarantee access to quality and affordable COVID-19 vaccine by the end of 2021 for 20% of the population at risk. To know the timing of vaccine supplies and the price, intensive communication has been maintained by the Indonesian government with GAVI and the COVAX Facility.[61]

One of the COVID vaccines currently being tested in Indonesia is the Sinovac vaccine, which comes from China.[62] The signing made by Biofarma with the Sinovax company, stated in the *Preliminary Agreement of Purchase and Supply of Bulk Product of COVID 19 Vaccine*, as many as 40 million doses of COVID-19 vaccine are ready to be fulfilled by Sinovax in Indonesia.[63]Erlangga Hartanto stated that this vaccine's price would be in the range of US $ 10-US $ 20, which is multiplied by the rupiah exchange rate against the dollar, which touched Rp. 14,800 per US dollar, the selling price of the COVID-19 vaccine from the Sinovac Company, was in the range of Rp. 148,000 to Rp. 296,000.[64]

One of the ways that the Government of Indonesia can reduce the price of the COVID-19 vaccine is by utilizing compulsory licensing. The Indonesian government can also use compulsory licensing as a last resort if negotiation efforts with the company regarding price [65]This effort can be made by the Government of Indonesia to get an affordable price for the vaccine, if it is found later. In the provisions of the TRIPs Agreement, compulsory licensing is a provision that allows a country to increase access to antiretroviral drugs through the supply of generic drugs needed by the country, for example, if a disease outbreak[66] To save someone's life, such as in the case of COVID-19, monopoly rights are contested.[67] In terms of Article 31, (b) TRIPs in particular compulsory licensing can be given to the government or third parties if, for urgent needs for the wider community's interests in a country caused by extreme conditions or public interests that are not intended for commercial purposes.[68]

This provision is advantageous for Indonesia as a developing country that is being affected by the COVID-19 outbreak to get access to cheap vaccines. By law, developing country governments have the right to issue compulsory licensing provisions for the COVID-19 drug vaccine if, one day, the vaccine can be found.[69]Other countries such as Chile and Ecuador have also adopted the Doha Declaration to deal with the COVID-19 pandemic through the issuance of compulsory licensing. Germany will also plan to limit patent rights in light of the conditions of this pandemic.[70] Although there is no currently approved treatment for COVID-19, national governments are legally entitled to issue compulsory licensing and should not circumvent this policy option when treatment is available.[71]

The Indonesian government's strategy in procuring a COVID-19 vaccine at an affordable cost can be applied in the formation of laws and regulations. The formation of laws and regulations needs to be done, considering that Indonesia is a constitutional state so that every social, national, and state life is carried out following the applicable legal system.[72] The formation of these laws and regulations can be used as a standard or regulation that can accommodate many people's interests[73]

When viewed from the perspective of Pancasila as *rechtside*e and *grundnorm* of the Indonesian state, the provisions of compulsory licensing will find offense with just and civilized, humanitarian principles.[74]Through Government Regulation no. 27 of 2004 concerning Procedures for Patenting by the Government of Anti-Retroviral Drugs, compulsory licensing in Indonesia is no longer a new thing. The implementation of these provisions for medicines in Indonesia has been going on since 2004. Over time, this regulation was finally amended and perfected through Presidential Regulation Number 76 of 2012 concerning the Use of Patents by the Government on Antiviral and Anti Retroviral Drugs.[75]

Regarding the procurement of vaccines, President Joko Widodo has issued Presidential Regulation Number 99 of 2020 concerning Vaccines Procurement and Implementation of Vaccinations in the Context of Combating the Coroiva Virus Disease 2019 (COVID-19) Pandemic, in order to overcome the spread of the COVID-19 outbreak, which is increasingly rife in Indonesia.[76]In the implementation of the COVID-19 vaccine procurement in Indonesia, the Ministry of Health assigns PT. Bio Farma, which also involves PT. Kimia Farma Tbk and PT. Indonesia Farma Tbk is a subsidiary of PT. Bio Farma. One of the assignments regulated by this regulation is collaborating with domestic and foreign institutions/business entities/companies to procure the COVID-19 vaccine.[77] The collaboration that collaborates with international institutions/agencies is carried out by offering or collaborating on research, production, and/or provision of the COVID-19 vaccine. CEPI and GAVI are foreign institutions explicitly stated by this regulation to collaborate in procuring the COVID vaccine in Indonesia. Other international institutions/bodies are not explicitly written in this regulation, but cooperation can also be carried out.[78] In every collaboration, with international institutions/agencies, coordination will be carried out by the Ministry of Foreign Affairs and the Ministry of Health.[79]

The Minister of Health will determine the COVID-19 vaccine price by paying attention to the emergency and limitations of the vaccine.[80] By looking at the condition of Indonesia that needs it, the price of the vaccine must be obtained by the Government of Indonesia at an affordable price. This is because compulsory licensing allows it, especially in terms of protecting public health in an emergency.

Based on Article 7 of the Doha Declaration, Indonesia itself has the opportunity to get access to affordable prices for vaccines imported from abroad. Even though this pandemic has ended, Indonesia can still have access to affordable drugs. This is because Indonesia's position as a developing country gives Indonesia the ability to issue these vaccines' compulsory licenses. However, as developed countries also have economic interests, which face developing countries like Indonesia to be profit-oriented, the Indonesian government must be competent in negotiating.

**4. CONCLUSION**

The world is currently being shaken by the spread of COVID-19, which has become a pandemic. Millions of people have contracted this pandemic, and hundreds of thousands of people have lost their lives due to this pandemic. Seeing this condition, the international community is currently working to bring about a pandemic solution as soon as possible. One way that is being implemented by the international community is by procuring the COVID-19 vaccine. Various world companies and even international institutions are flocking to produce vaccines to end this pandemic immediately. Indonesia is one of the countries that has become the centre of the spread of this pandemic globally; therefore, Indonesia, in this case, has the urgency to procure the COVID vaccine in Indonesia. To procure the COVID vaccine in Indonesia, the Indonesian government of Indonesia has collaborated with various parties both domestically and abroad. One of the Indonesian government's efforts in collaborating with foreign institutions is carried out with Gavi, Cepi, or other international institutions. Currently, the Indonesian government is also collaborating in the COVID nineteen vaccines procurement with one of the vaccine companies from China, namely Sinovax.

Apart from being one way to achieve a solution to the pandemic, vaccines also have the exclusive rights of their owners because vaccines are a form of a person's intellectual property. This exclusive right is sometimes used to get excess profits so that a business is created. In the provisions of the Doha declaration held in 2001, it was stated that in a country's interests, or an emergency, a country could apply for a compulsory license to prevent certain drugs from occurring. The Doha Declaration also provides an opportunity to apply for a compulsory license to address health problems in an emergency in the country. The parties who can produce and process drugs or vaccines to save many people in a country, then the exclusive rights owned by the owners of these drugs must be reduced. This is because, in the trips agreement, it is said that the agreement does not prohibit and may not prohibit the state's efforts to provide health services for its citizens. And if an emergency, in this case, the COVID-19 pandemic, has taken place, developing and underdeveloped countries still have the opportunity to access this COVID-19 vaccine at a low price as regulated in the provisions of article 7 of the Doha Declaration.

Indonesia is one of the countries affected by the COVID-19 outbreak, which is quite a lot, and the government has echoed emergency conditions and which as a world health institution, so Indonesia has the opportunity to get access to affordable vaccines from other countries. As well as Indonesia, as a developing country according to the provisions of the World Bank, which is also a participating country of the trips agreement, has the opportunity to apply for compulsory licenses if this pandemic has ended. Indonesia itself already has regulations regarding compulsory licenses in the form of Government Regulation No. 27 of 2004 concerning Procedures for Patenting by the Government of Antiretroviral Drugs. Presidential Regulation of the Republic of Indonesia Number 99 of 2020 concerning Vaccines Procurement and Implementation of Vaccinations in the Context of the 2019 Corona Virus Disease (COVID-19) Pandemic has also been issued by the government of the Republic of Indonesia to address the problem. In the provision, it is said that the Ministry of Health pays attention to the state of the country and also the limitations of vaccines and drugs in order to determine the amount of the price of these drugs to be purchased.

**ACKNOWLEDGEMENT**

Author would like to thank you to Universitas Lampung for supporting this research and the reviewer of this manuscript for accepting it.

**REFERENCES**

[1] Hongbo Zhu, Li Wei, and Ping Niu, "The novel coronavirus outbreak in Wuhan, China," Global Health Research and Policy, Vol. 5, No. 6, yr. 2020, p. 1.

[2]COVID-19 is an infectious disease caused by a new type of coronavirus. This new disease and virus started in December 2019 and became an epidemic in Wuhan City, China. In many countries around the world, COVID-19 has become a pandemic. This disease has the most common symptoms, such as dry cough, fever, and feeling tired. Aches and pains, nasal congestion, headache, conjunctivitis, skin rash, diarrhea, sore throat, loss of taste or smell, or discoloration of fingers or toes being other symptoms experienced by some patients with the possibility that it is less common, but sometimes mild symptoms can also allow infection by this disease. The transmission of this disease can occur through droplets from the mouth or nose of an infected person to other people. Most people infected with this disease can recover without special treatment, but 1 in 5 people with this disease experience severe pain and difficulty breathing. People with comorbid medical conditions such as high blood pressure, heart, lung problems, diabetes, or cancer, and older people (seniors) are more likely to have a more severe illness. But in reality, everyone can get this disease and get very sick. But cancer warriors and the elderly are more likely to have a more severe illness.

[3]https:(www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(COVID-2019)-and-the-virus-that-causes-it.

[4] Lo'ai Alanagreh, Foad Alzoughool, and Manar Atoum, "The Human Coronavirus Disease COVID-19: Its Origin, Characteristics, and Insights into Potential Drugs and Its Mechanisms", Pathogens, yr. 2020, p. 1.

[5] Muhamad Azhar, Hanna Aulia Azzahra, "Government Strategy in Implementing the Good Governance during COVID-19 Pandemic in Indonesia", Administrative Law & Governance Journal, Vol. 3 No. 2, yr. 2020, p. 241.

[6]https://www.who.int/emergencies/diseases/novel-coronavirus-2019.

[7]https://www.kompas.com/sains/read/2020/05/11/130600623/diumentuk-awal-maret-ahli--virus-corona-masuk-indonesia-dari-januari.

[8]http://www.dukcapil.kemendagri.go.id/Berita/baca/554/wow-jum-pria-masih-lebih-banyak-kemendagri-rilis-data-penduduk-semester-i-tahun-2020.

[9]https://COVID19.go.id/.

[10]COVAX is a unique and extraordinary global collaboration with the involvement of more than two-thirds of the world's countries. The COVID-19 vaccine portfolio owned by COVAX is the largest and most diverse globally, which can serve as hope for the world to see an end to this pandemic soon. In response to this ongoing pandemic in April 2020, WHO, as the World Health Organization together with the European Commission and France, have launched COVAX as one of the three pillars of the Access to COVID-19 Tools (ACT) Accelerator. The unification of world health organizations, government, producers, private, civil, and philanthropic is carried out by COVAX, providing innovative accessaccess to the COVID-19 vaccine.

[11]https:(www.who.int/news-room/detail/24-08-2020-172-countries-and-multiple-candidate-vaccines-engaged-in-COVID-19-vaccine-global-access-facility.

[12] Dwi Martini, Hayyanul Haq, Budi Sutrisno, "Legal Protection of Traditional Medicines Knowledge in the Indonesian Intellectual Property Rights (IPR) Regime (Studies on Sasak Traditional Communities)," Journal of Law and Justice, Vol. 6, No. 1, yr. 2017, p. 70.

[13] Dushyant Kumar Sharma, "Intellectual Property and the Need to Protect It", Indian J.Sci.Res. Vol. 9, No. 1, yr. 2014, p. 1.

[14]<http://www.hki.co.id/paten.html>.

[15]. Samariadi, "Implementation of Compulsory Licensing of Drug Patents in the Pharmaceutical Sector in Indonesia is Related to the Doha Declaration On The Trips Agreement And Public Health", De Lega Lata, Vol. I, No. 2, yr. 2016, p. 450.

[16] Lidya Shery Muis, "The Right to Accessibility of Patented Drugs for the Community", Pranata, Vol. 2, No. 1, yr. 2019, p. 37.

[17] Titon Slamet Kurnia, Right to Optimal Health Degree as Human Rights in Indonesia, Alumni, Bandung, yr. 2007, p. 2.

[18][https://reference.elsam.or.id/wp-content/uploads/2014/12/KESEHATAN-SEBAGAI-HAK-ASASI-MANUSIA.pdf](https://referensi.elsam.or.id/wp-content/uploads/2014/12/KESEHATAN-SEBAGAI-HAK-ASASI-MANUSIA.pdf).

[19]Putu Ayu Sriasih Wesna, "Doha Declaration as Community Protection for Access to Essential Medicines in Developing Countries Post-Trips Agreement", Kertha Wicaksana, Vol. 14, No. 1, yr. 2020, p. 57-58.

[20]*Ibid*., p. 58.

[21] Petra Moser, "Patents and Innovation: Evidence from Economic History", Journal of Economic Perspectives, Vol. 27, No. 1, yr. 2013, p. 37.

[22] Tony Hanoraga, Niken Prasetyawati, "Mandatory Patent License as One of the Limitation of Exclusive Patent Rights", Journal of Social Humanities, Vol. 8, No. 2, yr. 2015, p. 177.

[23]http://www.dukcapil.kemendagri.go.id/berita/baca/554/wow-jum-pria-masih-lebih-banyak-kemendagri-rilis-data-penduduk-semester-i-tahun-2020.

[24]https://www.who.int/emergencies/diseases/novel-coronavirus-2019.

[25]https://www.thejakartapost.com/news/2020/07/18/indonesias-COVID-19-cases-surpass-mainland-china-as-deaths-top-4000.html.

[26]https://www.kompas.tv/article/109355/idi-apabila-terus-abai-indonesia-bisa-jadi-epicentrum-COVID-19-dunia.

[27]https://corona.jakarta.go.id/id/data-pemantau.

[28]https://www.straitstimes.com/asia/se-asia/main-hospitals-in-jakarta-report-full-capacity-amid-COVID-19-surge-government-to-use-3.

[29]https://megapolitan.kompas.com/read/2020/09/14/05574471/psbb-di-jakarta-rem-darurat-akibat-lonjakan-kasus-COVID-19-sejak?page=all.

[30]https://www.cnnindonesia.com/ekonomi/20200910115116-532-544840/psbb-dki-semakin-nearkan-ri-dengan-resesi-ekonomi.

[31]https://republika.co.id/berita/qgf68t370/jakarta-psbb-total-ekonom-sudah-pasti-resesi.

[32]https://www.kompas.com/tren/read/2020/09/23/070000065/indonesia-bersiap-alami-resesi-ekonomi-ini-dampak-bagi-masyarakat?page=all.

[33]https://otomotif.kompas.com/read/2020/04/30/034200915/formula-e-jakarta-batal-karena-corona-bimana-nasib-sel later.

[34]https://sport.detik.com/sepakbola/liga-Indonesia/d-5191994/polri-tak-]-shopee-liga-1-bergulir.

[35][https://sport.detik.com/sepakbola/liga-indonesia/d-5089293/piala-dunia-u-20-2021-6-stadion-sudah-oke-tangkat-tunggu-surat-fifa](https://sport.detik.com/sepakbola/liga-indonesia/d-5089293/piala-dunia-u-20-2021-6-stadion-sudah-oke-tinggal-tunggu-surat-fifa).

[36]https://sport.detik.com/sepakbola/liga-indonesia/d-5089293/piala-dunia-u-20-2021-6-stadion-sudah-oke-tangkat-tunggu-surat-fifa.

[37]https://www.dw.com/id/bimana-p Pariwisata-indonesia-bertahan-di-tengah-pandemi/a-54818132.

[38]https://kumparan.com/kumparannews/pemerintah-pututus-pilkada-2020-tetap-digelar-di-tengah-pandemi-corona-1uFGExY3Yew.

[39]https://www.cnnindonesia.com/nasional/20200908114253-32-543914/dilema-pilkada-di-tengah-pandemi-tunda-atau-l continued.

[40]https://www.nst.com.my/news/nation/2020/09/626540/experts-sabah-could-unleash-tsunami-COVID-19-cases.

[41] https://www.cnbcindonesia.com/news/20200506172704-4-156807/di-hepan-who-sekjen-pbb-jokowi-minta-vaksin-jangan-mahal.

[42] Monopoly on Drug Prices is the Root of the BPJS Deficit Problem, Indonesia for Global Justice, p. 2.

[43] https://regional.kompas.com/read/2010/09/17/11384415/mengapa.obat.paten.mahal.

[44] https://money.kompas.com/read/2020/02/27/191913626/indonesia-belum-cocok-jadi-negara-maju-ini-alasannya.

[45] https://www.liputan6.com/global/read/4296764/bank-dunia-indonesia-urutan-terbawah-di-daftar-negara-kelas-menengah-atas.

[46][https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(20)30402-1/fulltext](https://www.thelancet.com/journals/lanres/article/PIIS2213-2600%2820%2930402-1/fulltext). See also in[https://www.france24.com/en/20200907-china-shows-off-COVID-19-vaccines-for-first-time](https://www.france24.com/en/20200907-china-shows-off-covid-19-vaccines-for-first-time).

[47]https://fortune.com/2020/08/18/COVID-vaccine-china-cansino-patent-coronavirus-vaccines-what-to-know/.

[48] Eduardo Urias and Shyama V. Ramani, "AccessAccess to medicines after TRIPS: Is compulsory licensing an effective mechanism to lower drug prices? A review of the existing evidence ", Journal of International Business Policy, yr. 2020, p. 2.

[49]. Article 4 Declaration on The TRIPs Agreement and Public Health.

[50] Achmad Amri Ichsan, "Juridical Analysis of Mandatory Licensing and Patent Use by the Government Based on the TRIP's Agreement", Jurnal Ilmu Hukum Legal Opinion, Vol. 2, No. 1, yr. 2014, p. 4.

[51] Jorge L. Contreras, "Expanding Access to Patents for COVID-19", Assessing Legal Responses to COVID-19, yr. 2020, p. 158.

[52]Eduardo Urias and Shyama V. Ramani, "AccessAccess to medicines after TRIPS: Is compulsory licensing an effective mechanism to lower drug prices? A review of the existing evidence ", Journal of International Business Policy, yr. 2020, p. 2.

[53] Esther K. Choo, MD, MPH, and S. Vincent Rajkumar, MD, "Medication Shortages During the COVID-19 Crisis: What We Must Do", Mayo Clinic, yr. 2020, p. 1114.

[54] Article 5 (b) and (c) Declaration on The TRIPs Agreement and Public Health.

[55]Article 7 Declaration on The TRIPs Agreement and Public Health.

[56] Niken Sari Dewi, Suteki, "Obstruction of Mandatory Patent License Implementation in the Context of Technology Transfer to Pharmaceutical Companies in Indonesia", Journal of Law Reform, Vol. 13, No. 1, yr. 2017, p. 2.

[57] Indrawati, AgungYudhistira Nugroho, "The Application of Principles of Indonesian Foreign Policy through Maritime Diplocy", Verity, Vol. 10, No. 20, yr. 2018, p. 14.

[58] Mangadar Situmorang, "Orientation of Indonesian Foreign Policy under the Jokowi-JK Government", JIHI, *[Vol. 11, No. 1, yr. 2015, p. 69.](http://103.36.68.33/index.php/JurnalIlmiahHubunganInternasiona/issue/view/205)*

[59]https://www.liputan6.com/bisnis/read/4357616/strategi-pemerintah-tekan-harga-vaksin-COVID-19-s]-lebih-murah.

[60]gavi.org/covax-facility.

[61]https://www.kemkes.go.id/article/print/20091600002/kemenkes-UNICEF-t Tanda-kerja-sama-pengadaan-vaksin-dan-obat-yang-terjapai.html.

[62]https://asia.nikkei.com/Spotlight/Coronavirus/Indonesia-teams-with-China-s-Sinovac-for-COVID-vaccine.

[63]https://www.voaindonesia.com/a/sinovac-siap-pasok-40-juta-dosis-vaksin-ke-indonesia/5551495.html.

[64]https://www.cnnindonesia.com/ekonomi/20200915101811-92-546565/harga-vaksin-corona-dari-sinovac-dibanderol-rp148-ribu.

[65]disagree. Esther K. Choo, MD, MPH, and S. Vincent Rajkumar, MD, "Medication Shortages During the COVID-19 Crisis: What We Must Do", Mayo Clinic, yr. 2020, p. 1114.

[66] hits a country. Hilary Wong, “The case for compulsory licensing during COVID-19”, Journal of Global Health, yr. 2020.

[67] Emaediong Ofonime Akpan and Chinonyerem This is Ememobong, "COVID-19 And The Rebirth of Compulsory Licensing: An Examination of The Right to Health Care", SSRN, yr. 2020, p. 2.

[68] Muh Ali Masnun and Dilla Nurfiana Ashanti, "The Urgency to Restrict the Exclusive Rights of COVID-19 Patents Through the Application of Compulsory Licenses in Indonesia", Journal of Legal Communication, Vol. 6, No. 2, yr. 2020, p. 462.

# [69] [Hilary Wong](https://www.ncbi.nlm.nih.gov/pubmed/?term=Wong%20H%5BAuthor%5D&cauthor=true&cauthor_uid=32509289), "The case for compulsory licensing during COVID-19", [*J Glob Health*](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7242884/)*,* Vol. 10, No. 1, yr. 2020.

[70] Enrico Bonadio and Andrea Baldin, "COVID-19, Patents and the Never-Ending Tension between Proprietary Rights and the Protection of Public Health", European Journal of Risk Regulation, Vol. 11, No. 2, p. 392.

[71] Muh Ali Masnun and Dilla Nurfiana Astanti, "The Urgency to Restrict the Exclusive Rights of COVID-19 Patents Through the Application of Compulsory Licenses in Indonesia", Journal of Legal Communication, Vol. 6, No. 2, yr. 2020, p. 462.

[72] Mahendra Jati, "Community Participation in the Process of Forming Progressive Legislation", Journal of Rechts Vinding, Vol. 1, No. 3, yr. 2012, p. 329.

[73]. Bustanuddin, SH, LL.M., "Analysis of Explanatory Functions in Forming Legislation in Indonesia", Innovative, Vol. 6, No. 7, yr. 2013, p. 11.

[74] Putera Astomo, "Formation of Law in the Context of National Law Reform in the Era of Democracy", Journal of the Constitution, Vol. 11, No. 3, yr. 2014, p. 584.

[75] Sartika Nanda Lestari, "Implementation of Compulsory Licensing of Drugs in the Pharmaceutical Sector in Indonesia (Study Based on the Doha Declaration On The Trips Agreement And Public Health)", Thesis, Diponegoro University, yr. 2012, p. 23.

[76]https://www.cnnindonesia.com/nasional/20201007151021-20-555517/jokowi-terbitan-perpres-vaksin-COVID-19.

[77] Article 5 paragraphs (1), (3), and (4) Presidential Regulation of the Republic of Indonesia Number 99 of 2020 concerning Vaccines Procurement and Implementation of Vaccinations in the Context of Combating the Coroiva Virus Disease 2019 (COVID-19) Pandemic.

[78] Article 7 paragraphs (1) and (2) of the Presidential Regulation of the Republic of Indonesia Number 99 of 2020 concerning Vaccines Procurement and Implementation of Vaccinations in the Context of Combating the Coroiva Virus Disease 2019 (COVID-19) Pandemic.

[79] Article 8 paragraph (1) Presidential Regulation of the Republic of Indonesia Number 99 of 2020 concerning Vaccines Procurement and Implementation of Vaccinations in the Context of Combating the Coroiva Virus Disease 2019 (COVID-19) Pandemic.

[80]Article 10 paragraph (1) Presidential Regulation of the Republic of Indonesia Number 99 of 2020 concerning Vaccines Procurement and Implementation of Vaccinations in the Context of Combating the Coroiva Virus Disease 2019 (COVID-19) Pandemic.