


ARTÍCULO DE INVESTIGACIÓN

## China and India's Health Diplomacy in Africa during the COVID-19 Pandemic

*Diplomacia de Salud de China e India en África durante la Pandemia de COVID-19*

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**ABSTRACT** So-called *health diplomacy* has become a fundamental element in contemporary International Relations, especially in the context of world health crises such as the global COVID-19 pandemic. Countries like China and India have stood out in this field through their South-South Cooperation (SSC) activities, together with countries of the Global South. This article seeks to compare the health diplomacy conducted by China and India in Africa within the context of the COVID-19 pandemic. Our guiding question is: *How have these countries employed International Development Cooperation (IDC) policies in this region to fight the pandemic?* To answer this, we have analyzed how the IDC practices of these countries are related to their geopolitical and economic interests in the region. The results indicate that China stands out in terms of its vaccine donations, hospital supplies, and equipment, in addition to financial cooperation such as debt relief. India, meanwhile, stands out in terms of financial cooperation, based on sharing telecommunication technologies and teleconsulting, in addition to supplying vaccines, medication, and hospital equipment.

**KEYWORDS** Health Diplomacy; South-South Cooperation; International Development Cooperation; COVID-19; Africa.



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**RESUMEN** La denominada "diplomacia de la salud" ha adquirido un papel fundamental en las Relaciones Internacionales contemporáneas, especialmente en momentos de crisis sanitaria global, como ocurre con la pandemia de la Covid-19. Países como China e India se han destacado en este ámbito, principalmente a través de sus actividades de Cooperación Sur-Sur (CSS) con naciones del Sur Global. Este artículo tiene como objetivo analizar de manera comparativa la "diplomacia de la salud" implementada por China e India en África durante la pandemia de la Covid-19. La pregunta que guía este estudio es: "¿Cómo han utilizado estos países las políticas de Cooperación Internacional para el Desarrollo (CID) en la región para combatir la pandemia?" Para responder a esta interrogante, examinamos cómo las prácticas de CID de estos países se relacionan con sus intereses geopolíticos y económicos en la región. Los resultados del análisis indican que la actuación china se ha destacado a través de donaciones de vacunas, insumos y equipamiento hospitalario, además de acciones en el ámbito de la cooperación financiera, como el alivio de la deuda. El caso indio sobresale por la predominancia de la cooperación técnica, mediante la compartición de tecnologías para telecomunicaciones y teleconsultas, además del suministro de vacunas, medicamentos y equipamiento hospitalario.

**PALABRAS CLAVES** Diplomacia en Salud; Cooperación Sur-Sur; Cooperación Internacional para el Desarrollo; Covid-19, África.

## Introduction

The past few decades have seen profound transformations in the international system, especially in the field of International Development Cooperation (IDC). Emerging countries, especially India and China, have gone from playing secondary roles to becoming protagonists in this field, performing a group of actions that are in contrast to Official Development Assistance (ODA) practices<sup>1</sup>. This emergence of "new donors" and "new practices" in the IDC field has resulted in the decentralization of this field, to the extent that the IDC field has become a stage of intense political disputes between traditional donors and these "new donors"<sup>2</sup>. However, it should be pointed out that the role of developing countries in this field is not as recent as it might appear at first glance. Its roots date back to the Bandung African-Asian Conference in Indonesia during the 1950s, one of its formative milestones.

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1. APOLINÁRIO JÚNIOR (2019; 2022).

2. BESHARATI & ESTEVES (2015); MAWDSLEY (2012).

Nonetheless, the South-South Cooperation (SSC) that is occurring today differs fundamentally from its first manifestations at the beginning of the 1970s to the extent that contemporary ideas about SSC do not possess the radical nature of the original formulation, and are rather a part of the new context of relationships between the North and the South and between states and markets<sup>3</sup>.

Since its origins, SSC has been marked by the creation of cooperation programs between countries of the Global South covering areas which range from economics – such as the reduction of tariffs, investments in production and infrastructure, the internationalization of companies, and technology transfers – to education – such as grants for students from Global South countries – and the environment – such as investments and treaties oriented towards environmental preservation and sustainable development<sup>4</sup>. In addition to these areas, there is one field that has gained increased prominence in recent years: the area of Global Health. Underdeveloped countries tend to have underdeveloped health sectors, and they frequently become dependent on international cooperation to support their health systems. This area has received particular attention during pandemics and health crises, such as the HIV crisis, especially in Africa in the 1990s, and more recently within the context of the COVID-19 pandemic.

Among SSC providers in the healthcare area, China and India have stood out in recent years, especially within the context of the COVID-19 pandemic, with their vaccine donation policies among other practices related to health diplomacy<sup>5</sup>. Thus, this study seeks to analyze the performance of China and India in the African continent in terms of the health area during the COVID-19 pandemic in light of their geopolitical and economic interests. This article will present a comparative analysis of their engagement in terms of their similarities and differences in terms of health diplomacy-related activities. Even though comparative analysis is no substitute for the specific investigation of each case in depth<sup>6</sup>, this approach can be a significant tool for understanding certain phenomena and processes in the Foreign Policy Analysis field<sup>7</sup>, especially in the area of international cooperation<sup>8</sup>.

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3. MORVARIDI & HUGHES (2018).

4. BROADMAN (2008).

5. APOLINÁRIO JÚNIOR *et al.* (2022).

6. MOORE (1966).

7. BEASLEY *et al.* (2012); BREUNING (2007).

8. MILANI & CARVALHO (2013).

Analyzing Africa is pertinent for various reasons. First of all, Africa historically has been a central region for SSC policies involving both countries due to the large number of countries in the region and their proximity to the Asian continent, and the region's considerable socio-economic vulnerabilities, which naturally offer space for receiving IDC. Summing up these factors, we may note that COVID-19 has made possible new fronts of cooperation in the region and has demonstrated Africa's need for international help to combat the pandemic<sup>9</sup>.

The literature on international aid identifies moral and humanitarian goals, diplomatic-political objectives, and economic interests as the main reasons for a country to provide foreign aid<sup>10</sup>. This specific scientific research agenda analyzes the relationship between idealism and pragmatism<sup>11</sup>. However, one can argue that altruistic motives and the promotion of national interests do not need to be mutually exclusive. This is because countries can display solidarity as they pursue foreign policy objectives<sup>12</sup>.

Investigating health diplomacy within the context of the COVID-19 pandemic provides us with a case study for evaluating bilateral cooperation relationships, given that the countries of the North, as well as the South, have donated medical products<sup>13</sup>. A growing literature has investigated the actions of various providers of cooperation within the environment of the COVID-19 pandemic in light of geopolitical and strategic interests<sup>14</sup>. This study contributes to these current debates by comparing practices related to health diplomacy in China and India, particularly in Africa during the COVID-19 pandemic.

Our analysis is based on primary and secondary sources. The primary sources consist of databases of pharmaceutical product exports and vaccine donations, such as the International Trade Centre database and the UNICEF COVID-19 Vaccine Market Dashboard; and official documents, such as white papers and other documents issued by governmental bodies in these countries<sup>15</sup>. Our secondary sources consist of specific literature, emphasizing Indian and Chinese authors.

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9. ADEREMI *et al.* (2020).

10. DEGNBOL-MARTINUSSEN & ENGBERG-PEDERSEN (2003); LANCASTER (2008); VAN DER VEEN (2011).

11. ALESINA & DOLLAR (2000); GULRAJANI & SWISS (2017); MCKINLAY & LITTLE (1977); PINO & LEITE (2010).

12. INOUE & VAZ (2012); MILANI (2018).

13. HAYAKAWA & IMAI (2022).

14. FUCHS *et al.* (2022); TELIAS & URDINEZ (2022); APOLINÁRIO JÚNIOR *et al.* (2022).

15. GLOBAL DEVELOPMENT POLICY CENTER (2023); INTERNATIONAL TRADE CENTRE (2023); UNICEF (2023).

Thus, this article seeks to explore the actions of these Asian countries in Africa in terms of health diplomacy. To accomplish this, we will adopt the following structure. The first section presents a brief contextualization of IDC, more specifically within the field of health diplomacy, which has been realized historically by China and India. In the following part, we will analyze the actions of both countries in Africa during the COVID-19 pandemic, based on a comparative research design. Finally, we will present the article's main conclusions.

## Chinese and Indian Health Diplomacy

Health diplomacy can be traced back to the 19<sup>th</sup> century, which increased trade and mobility among nations with poverty and poor sanitation and increased the circulation of disease<sup>16</sup>. From the second half of the 19<sup>th</sup> century to the first half of the 20<sup>th</sup> century, countries sought international engagement to deal with various subjects related to health such as pollution, infectious diseases, and the markets for alcohol and narcotics<sup>17</sup>.

Health diplomacy, by definition, involves international aid or cooperation practices that aim to promote global health and even achieve objectives that are not necessarily related to health<sup>18</sup>. This modality of diplomacy can include and connect international, economic, administrative, and legal actors in international negotiations to shape global health policy<sup>19</sup>. Specifically, these actors include states, international organizations, pharmaceutical industries and laboratories, and even individuals<sup>20</sup>. Health diplomacy is an integral part of three global agendas. 1) Security: due to the fear of the proliferation of diseases, natural disasters, human conflicts, and other emergencies; 2) Economic: concerned with underdevelopment caused by poor health or pandemics, as well as their effects on the international market; and 3) Social Justice: health as a humanitarian cause and an inalienable right of all, with there being a need to guarantee access for all under every situation<sup>21</sup>.

International institutions and organizations also involve themselves in health diplomacy. The World Health Organization (WHO) has been the leading institution responsible for creating global norms and conduct in the fight against COVID-19, with the approval of UN Resolution 74/270 in 2020, "Global solidarity to fight the coronavirus disease 2019"<sup>22</sup>. Moreover, the institution was responsible for coordinating

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16. KICKBUSCH & IVANOVA (2013).

17. FIDLER (2001).

18. FAZAL (2020).

19. TAGHIZADE *et al.* (2021).

20. ADAMS *et al.* (2008); OKEREKE (2021).

21. SINGH (2017).

22. UNITED NATIONS (2020).

the central multilateral mechanism for sharing vaccines with countries with poorer conditions, namely the COVAX Facility mechanism<sup>23</sup>.

In terms of the methods used to realize this type of diplomacy, they vary depending on the actors involved and recently have consisted of exporting generic medicine in the case of India and donating masks and equipment in the case of China<sup>24</sup>. We can also cite the realization of partnerships such as the “International Partnership for Health” and security precautions in international trade to avoid the proliferation of diseases led by the United Kingdom<sup>25</sup>, as well as the donation of vaccines, which became prominent during the COVID-19 pandemic<sup>26</sup>.

### **Chinese Health Diplomacy**

Chinese health diplomacy can be dated back to the foundation of the People’s Popular Republic of China in 1949, and it has been considered a tool to strengthen ties with the rest of the world and the country’s health system that can be divided into five phases<sup>27</sup>. The first phase dates from the foundation of the People’s Popular Republic of China in the 1950s, which was a period of alignment with the Union of Soviet Socialist Republics (USSR), this was marked by cooperation with its strategic ally, particularly by the exchange of doctors and the collaboration in the construction of pharmaceutical factories. The second phase (1960-1970) was marked by anti-imperialist and anti-colonial struggles, where China assisted in various parts of the world with a focus on Africa, Asia, and Latin America, most notably through the sending of medical teams around the world. The third phase (1970-1980) was marked by the rise of multilateralism in Chinese health diplomacy with a closer relationship with the United States and its recognition of and entrance into the United Nations and the World Health Organization. The fourth phase during the 1980s and 1990s was characterized by significant international bilateral and multilateral cooperation in the health area, especially in managing global health crises. An example of this international engagement was Beijing’s signing of various treaties such as the “Protocol for Scientific Health Cooperation between the United States and the People’s Republic of China”, as well as a deepening of its ties with international organizations such as the WHO. The fifth phase is the current phase, marked by a more proactive posture in international organizations, as well as greater engagement with various countries and blocks, such as the European Union<sup>28</sup>.

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23. GAVI (2023).

24. HAYAKAWA & IMAI (2022); MOL *et al.* (2022).

25. LABONTÉ & GAGNON (2010).

26. APOLINÁRIO JÚNIOR *et al.* (2023); CHEN (2022).

27. JING *et al.* (2011).

28. JING *et al.* (2011).

The main characteristic of Chinese health diplomacy currently is its great assertiveness on the international stage, operating in specific countries along with international and regional organizations. Its cooperation with the WHO stands out in terms of various activities of the institution around the world, as well as its collaboration with the European Union and the fight against AIDS, and cooperation with developed countries such as the United Kingdom and the United States, as well as SSC efforts together with countries of the Global South<sup>29</sup>.

Among the practices related to health diplomacy, Beijing prioritizes the sending of medical personnel and material, as well as infrastructure financing for hospitals and health installations. However, it should be noted that China began sending health professionals as “White angels” or “Barefoot doctors” to the poorer countries of Africa in 1960<sup>30</sup>. China also is a large manufacturer of hospital equipment and supplies and a large financer of infrastructure projects such as hospitals. In 2009 alone, the country committed to constructing 30 hospitals in Africa and providing 37.5 million dollars in malaria medicine<sup>31</sup>.

Performed in various ways, health diplomacy is an essential tool for China, given that it fosters trust and proximity in exchange for cooperation in other areas such as trade and the use of natural resources<sup>32</sup>. This diplomacy is also responsible for generating opportunities for the country to act internationally. This can be analyzed in the case of the SARS pandemic, through which Beijing came to play a more proactive role in the WHO. It also used this opportunity to reiterate its commitment to the Chinese policy of improving the African health system<sup>33</sup>. During the COVID-19 pandemic, China became known for *mask diplomacy*, which consisted of sending medical masks and equipment to various countries, using COVID-19 as an opportunity to expand this diplomatic field<sup>34</sup>. Moreover, it used “vaccine diplomacy” through donations and commercial sales throughout the world, especially to countries of the Global South that did not have access to the vaccines provided by countries of the Global North<sup>35</sup>.

Finally, China, even though it is a great practitioner of this type of diplomacy, faces difficulties that limit its actions in this field and represent challenges that need to be overcome. These difficulties include the challenges of internal health care and limited bureaucratic capacity. However, these limitations have not prevented China from positioning itself as a great actor in the global health diplomacy field<sup>36</sup>.

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29. JING *et al.* (2011).

30. CHAN *et al.* (2010).

31. YOUDE (2010).

32. THOMPSON (2005).

33. CHAN *et al.* (2010).

34. TELIAS & URDINEZ (2022).

35. APOLINÁRIO JÚNIOR *et al.* (2022).

36. BLISS (2011).

## Indian Health Diplomacy

Even though the SSC efforts of India date from its international activity during the 1950s and 1960s, in the post-independence context, Indian engagement in health diplomacy only rose to prominence in the 1990s due to its assistance in the fight against HIV in African countries<sup>37</sup>. The activity of New Delhi in this field has grown in recent years, so health diplomacy has currently become an integral part of its IDC program<sup>38</sup>.

As has China, India has framed its IDC efforts within the narrative of SSC, utilizing this policy as a diplomatic tool to promote its foreign trade and investments, especially in developing nations<sup>39</sup>. Despite this commitment, India has not demonstrated as much interest as China in the WHO, given that it understands this organization as an agency for implementing and not formulating policies and initiatives in the health area<sup>40</sup>.

India has been a crucial producer of generic pharmaceuticals and was the fourth-largest producer of this type of medicine at that time. It was also responsible for 22% of world commerce for this type of product<sup>41</sup>. It should be noted that India was the formulator and main backer of the proposal to temporarily waive patents for COVID-19 vaccines in multilateral trade negotiations in the World Trade Organization (WTO)<sup>42</sup>.

The issue of generic medicine is of great importance to India given that it is now considered the largest producer of generics in the world, which were very valuable to developing countries, especially in Africa, in fighting the HIV pandemic during the 1990s<sup>43</sup>. It should be noted that the COVID-19 pandemic provided another opportunity to get close to the African continent because these countries needed medicine and medical equipment to fight the new disease. Indian manufacturers are now responsible for 67% of the products pre-approved by the WHO<sup>44</sup>. The export of medical supplies and generic medicine has transformed India into almost an African necessity, to the extent that in 2018, it alone was responsible for a fifth of Africa's medical imports<sup>45</sup>.

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37. MOL *et al.* (2022).

38. SINGH (2017).

39. SINGH (2017).

40. HUANG (2013).

41. HUANG (2013).

42. CHATTU *et al.* (2021); OKEREKE (2021); SHARUN & DHAMA (2021); SINGH (2017); ZAROCOSTAS (2021).

43. GUERIN *et al.* (2020).

44. GUERIN *et al.* (2020).

45. GUERIN *et al.* (2020).



In addition to generics, India also conducts its health diplomacy through donations, project financing, technology, and medical tourism. As for donations, India usually provides various items such as medicine, ambulances, and medical equipment<sup>46</sup>. The country also finances various infrastructure projects, especially in the African continent and India's neighboring countries, such as hospitals, medical centers, and medical schools<sup>47</sup>.

Regarding technology, India is focused on using technological apps for tracking and telemedicine. An example is the eVBAB project, which provides African health professionals with virtual training, and the Pan-African eNetworking initiative, launched in 2009, to connect various African hospitals with Indian doctors<sup>48</sup>. India is also a destination for citizens from all over the world who seek medical tourism for various reasons such as proximity, cost-benefit, quality, and short waiting times<sup>49</sup>. Thus, the country invests in medical tourism, with the Indian government itself facilitating this modality, which is also responsible for the expansion of the Indian health sector, which has begun looking for markets in other parts of the world<sup>50</sup>.

Even though India has conducted health diplomacy in different instances, it has great possibilities in terms of expansion. It has a large contingent of doctors and professionals who can participate in this diplomatic effort to the extent that its diplomacy is more and more committed to promoting global health<sup>51</sup>. Despite these opportunities, considerable challenges remain. Among these, the most notable are the lack of a properly formulated and implemented health policy, the need to create a diplomatic corps specialized in this type of diplomacy, and the budgetary constraints of this policy<sup>52</sup>. Another challenge India may face in the future is an increase in the costs of health diplomacy. On a global level, development costs in the health area have gone from \$ 5.59 billion in 1990 to \$ 38.9 billion in 2018, and the estimates are that it will reach \$ 45 billion by 2050<sup>53</sup>. Considering that global costs increase every year, India will have to make difficult decisions if it cannot overcome these limitations<sup>54</sup>. Finally, even with these difficulties, India continues to explore opportunities in health diplomacy, investing in low-cost vaccines for the cure and prevention of diseases such as COVID-19<sup>55</sup>.

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46. HUANG (2013).

47. HUANG (2013).

48. CHATURVEDY & SHERBUT (2020).

49. MODI (2011).

50. GUPTA & DAS (2012).

51. SINGH (2017).

52. HUANG (2013); SINGH (2017).

53. SINGH (2017); OLUSANYA *et al.* (2021).

54. SINGH (2017).

55. PANDIT & VERSTAPPEN-FLICKR (2021).

## Chinese activities in Africa during the COVID-19 pandemic

China is a great economic partner of the African continent, with almost 48% of the continent's exports directed to the Asian giant. However, with the onset of the pandemic and its impacts on global trade, its imports and exports with Africa have decreased<sup>56</sup>. As a result, this continent, whose economic and social pillars are already fragile, is now increasingly vulnerable. The fragility of the continent could have been exploited by China, given that a large portion of the medical material for fighting COVID-19 that Africa needed was imported from China, in addition to the fact that its pioneering role in producing a vaccine has given the country an advantage and influence not only in Africa but also throughout the entire world<sup>57</sup>.

Moreover, the debts of African countries with China, their great trade partner, have enabled the country to expand its influence in the region through financial cooperation<sup>58</sup>. Alleviating debt, such as the freezing of payments, has been practiced by China and has been justified as an SSC practice to the extent that many countries need Chinese exports of medical equipment and medicine to fight the pandemic<sup>59</sup>. Given that many countries are rich in natural resources, the provision of supplies to fight the COVID-19 pandemic, such as medical equipment and vaccines, can give China an advantage in the exploitation of these resources<sup>60</sup>.

Even though there is no lack of opportunities for China to exercise and develop its health policy in the region, there are obstacles that have inhibited cooperation. Initially, the most prominent issues were racism and distrust among African immigrants in China and vice-versa<sup>61</sup>. This issue, even though it has been little explored in Chinese-African relations, has led many countries to make it more difficult for Chinese immigrants to enter Africa. This issue could harm China, and given that its companies are public, it will inevitably send Chinese representatives and employees to Africa, where these issues make their entry more complicated, and a lack of security can delay these processes<sup>62</sup>.

In addition to the issue of the difficulty of sending people, there is also a difficulty in defining priorities for the training and sending of Chinese medical teams to other countries. This lack of priorities made China lose opportunities to play an even higher

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56. ADEREMI *et al.* (2020); DHAR (2020).

57. ADEREMI *et al.* (2020).

58. KEBRET & RYDER (2023).

59. AIDOO (2020).

60. AYOMITUNDE *et al.* (2020).

61. QIU (2021).

62. QIU (2021).

role in the COVID-19 pandemic and strengthen its position in the health diplomacy field<sup>63</sup>. Thus, it may be noted that the COVID-19 pandemic revealed the need for adjustments, as well as continuity in Sino-African cooperation, with China returning to the health area to expand its influence in the region<sup>64</sup>.

In terms of supplying medical materials, it should be noted that China exported a large variety of pharmaceutical products (HS Code 30) to Africa during the pandemic. (Table 1):

**Table 1.**

*Chinese Exports to Africa of Pharmaceutical Products (HS:30).*

<b>Product</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Human Blood; Animal blood prepared for therapeutic, prophylactic, or diagnostic uses, among others.	US\$ 58,023	US\$ 71,223	US\$ 2,012,577
Medications consisting of one or more products for therapeutic or prophylactic use, among others.	US\$ 572,405	US\$ 635,299	US\$ 702,286
Strips, gauze, bandages, and similar items, e.g. coverings, plastic adhesives, plasters, among others.	US\$ 101,211	US\$ 89,671	US\$ 86,105
Dried glands and other organs for organotherapeutic uses, in a powdered or non-powdered state, extracts, among others.	US\$ 20,025	US\$ 42,116	US\$ 35,977
Medications consisting of two or more constituents mixed for therapeutic uses, among others.	US\$ 26,487	US\$ 26,983	US\$ 30,859
Pharmaceutical preparations and derivative products in category 3006.10.10 to 3006.60.90.	US\$ 13,756	US\$ 19,114	US\$ 16,973
<b>Total</b>	<b>US\$ 791.907</b>	<b>US\$ 884,406</b>	<b>US\$ 2,884,777</b>

Source: Elaborated by the authors, based on data provided by the International Trade Centre (2023).

63. MA *et al.* (2021).

64. MORGAN (2021).

In addition to the increase in exports of pharmaceutical products in general, there was an increase in Chinese exports of products specifically related to fighting the COVID-19 pandemic in Africa (Table 2).

**Table 2.**

*Chinese Exports to Africa of COVID-19 Pandemic-Related Items.*

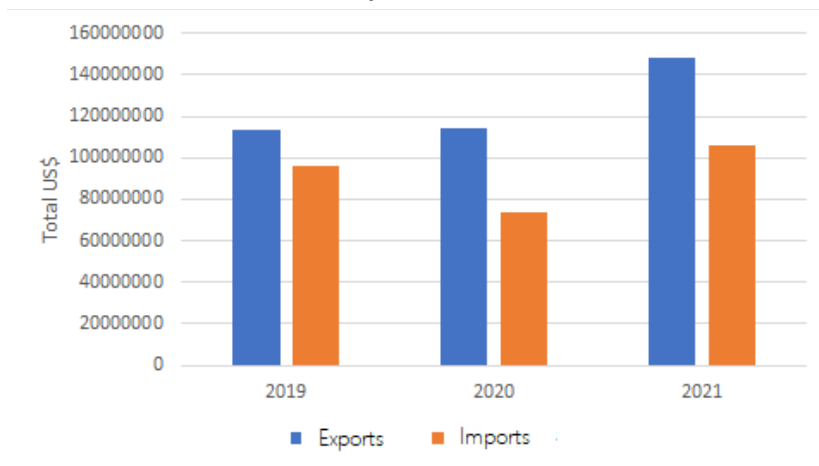
<b>Product</b>	<b>2020</b>	<b>2021</b>
COVID-19 vaccines, test kits, instruments, and diagnostic apparatus.	US\$ 300,835	US\$ 2,218,002
Vaccines for human medicine.	US\$ 15,545	US\$ 1,900,665
Reagents and diagnostics for laboratories, among others.	US\$ 129,982	US\$ 117,215
Containers, jars, glassware, bottles, and other storage utensils, among others.	US\$ 99,227	US\$ 114,566
Immunological products separated and stored in doses, among others.	US\$ 45,589	US\$ 82,679
Culture for the development of microorganisms, among others.	US\$ 10,135	US\$ 2,749
Glass vials.	US\$ 357	US\$ 128
<b>Total</b>	<b>US\$ 601.670</b>	<b>US\$ 4.436.004</b>

Source: Elaborated by the authors, based on data provided by the International Trade Centre (2023).

Moreover, we note significant growth in Chinese exports and imports with the African continent when we compare the period before the COVID-19 pandemic and 2021 (Graph 1). However, it should be noted that in 2020, when the health crisis took on global proportions, Chinese imports from Africa were affected more than its exports, reflecting the effects of the pandemic on the Chinese economy at that time.

**Graph 1.**

*Bilateral Trade between China and Africa.*



Source: Elaborated by the authors, based on data provided by the International Trade Centre (2023).

Analyzing vaccine donations to Africa, we observe that China has donated a significant quantity of vaccines to the region, especially countries like Ethiopia, Egypt, Uganda, Tanzania, and Zimbabwe (EspaçoReservado1) (Table 3).

**Table 3.**

*Chinese Vaccine Donations to Africa.*

Recipient	Vaccine	Developer	Donated doses	Delivered doses
Ethiopia	BBIBP-CorV	Sinopharm (Beijing)	13700000	13700000
Egypt	Coronavac	Sinovac	62000000	12000000
Uganda	Coronavac	Sinovac	6000000	6000000
Tanzania	BBIBP-CorV	Sinopharm (Beijing)	4500000	4500000
Zimbabwe	BBIBP-CorV	Sinopharm (Beijing)	8000000	4000000
Tunisia	Coronavac	Sinovac	2600000	2600000
Mozambique	BBIBP-CorV	Sinopharm (Beijing)	1260000	1260000
Zâmbia	BBIBP-CorV	Sinopharm (Beijing)	1700000	1100000
Djibouti	BBIBP-CorV	Sinopharm (Beijing)	1100000	1100000
Mauritania	BBIBP-CorV	Sinopharm (Beijing)	1050000	1050000
Zimbabwe	Coronavac	Sinovac	7000000	1000000
Somalia	BBIBP-CorV	Sinopharm (Beijing)	700000	700000
Benin	Coronavac	Sinovac	600000	600000
Mali	BBIBP-CorV	Sinopharm (Beijing)	600000	600000

Burundi	BBIBP-CorV	Sinopharm (Beijing)	500000	500000
Rwanda	BBIBP-CorV	Sinopharm (Beijing)	500000	500000
Burkina Faso	BBIBP-CorV	Sinopharm (Beijing)	400000	400000
Gabon	BBIBP-CorV	Sinopharm (Beijing)	400000	400000
Guinea	BBIBP-CorV	Sinopharm (Beijing)	400000	400000
Níger	BBIBP-CorV	Sinopharm (Beijing)	400000	400000
Serra Leoa	BBIBP-CorV	Sinopharm (Beijing)	400000	400000
Sierra Leone	BBIBP-CorV	Sinopharm (Beijing)	400000	400000
Togo	Coronavac	Sinovac	400000	400000
Egypt	BBIBP-CorV	Sinopharm (Beijing)	300000	300000
Equatorial Guinea	BBIBP-CorV	Sinopharm (Beijing)	300000	300000
Guinea-Bissau	BBIBP-CorV	Sinopharm (Beijing)	300000	300000
Madagascar	BBIBP-CorV	Sinopharm (Beijing)	300000	300000
Senegal	BBIBP-CorV	Sinopharm (Beijing)	300000	300000
Sudan	BBIBP-CorV	Sinopharm (Beijing)	250000	250000
Lesotho	BBIBP-CorV	Sinopharm (Beijing)	203340	203340
Botswana	Coronavac	Sinovac	2200000	200000
Ethiopia	Coronavac	Sinovac	200000	200000
Djibouti	Coronavac	Sinovac	200000	200000
Argeria	BBIBP-CorV	Sinopharm (Beijing)	200000	200000
Angola	BBIBP-CorV	Sinopharm (Beijing)	200000	200000
Cameroon	BBIBP-CorV	Sinopharm (Beijing)	200000	200000
Chad	BBIBP-CorV	Sinopharm (Beijing)	200000	200000
Kenia	BBIBP-CorV	Sinopharm (Beijing)	200000	200000
Papua New Guinea	BBIBP-CorV	Sinopharm (Beijing)	200000	200000
Central African Re- public	Coronavac	Sinovac	150000	150000
Comoros	BBIBP-CorV	Sinopharm (Beijing)	100000	100000
Ivory Coast	BBIBP-CorV	Sinopharm (Beijing)	100000	100000
Mauritius	BBIBP-CorV	Sinopharm (Beijing)	100000	100000
Namibia	Coronavac	Sinovac	100000	100000
Cape Verde	BBIBP-CorV	Sinopharm (Beijing)	50000	50000
<b>Total</b>			<b>122403340</b>	<b>59803340</b>

Source: Elaborated by the authors, based on data available from the UNICEF Covid-19 Market Dashboard.

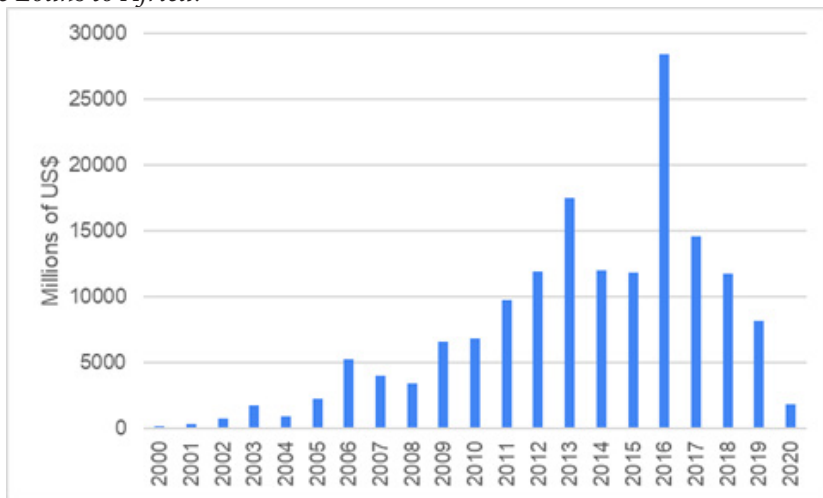
Concerning other cooperation practices beyond vaccine donations, there were efforts made to send Chinese medical teams to several countries in Africa<sup>65</sup>. Among these countries, Algeria, Zimbabwe, Nigeria, and the Democratic Republic of the Congo stand out. According to the state press agency *Xinhua*, in August 2020, a thousand Chinese health professionals were in Africa fighting the COVID-19 pandemic<sup>66</sup>.

China also uses other instruments for cooperation. According to China's Ministry of Foreign Affairs, the country signed debt relief agreements with 12 African countries in addition to providing loans to 15 countries, and suspending "more debts than any other G20 country"<sup>67</sup>. Besides, Chinese companies also participated in this cooperation arrangement with various Chinese companies using digital platforms to promote African exports to China.

In the 76<sup>th</sup> Session of the General Assembly in 2021, President Xi Jinping also demonstrated interest in continuing the "One Belt, One Road" initiative in the region, based on investments in green technologies, 5G, intelligent cities, and infrastructure<sup>68</sup>. In fact, the economic presence of China in the financial plans of the region has grown significantly, as can be observed in the graph below (Graph 2), elaborated with data obtained from the Chinese Loans to Africa platform<sup>69</sup>.

### Graph 2.

*Chinese Loans to Africa.*



Source: Elaborated by the authors, based on the Chinese Loans to Africa (CLA) Database.

65. CHINA EMBASSY IN THE FEDERAL REPUBLIC OF NIGERIA (2020); XINHUA (2020; 2021).

66. XINHUA (2020).

67. MINISTRY OF FOREIGN AFFAIRS OF THE PEOPLE'S REPUBLIC OF CHINA (2021a).

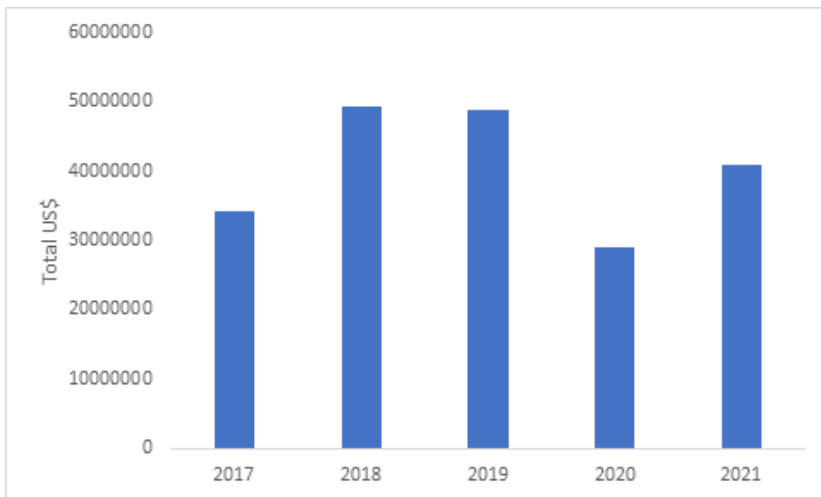
68. MINISTRY OF FOREIGN AFFAIRS OF THE PEOPLE'S REPUBLIC OF CHINA (2021b).

69. GLOBAL DEVELOPMENT POLICY CENTER (2023).

The increase of Chinese loans in the region in recent decades seems to corroborate the argument of Hanauer and Morris (2014) that China has four main objectives in Africa. i) Access to natural resources, mainly gas and petroleum; ii) Access to markets for its exports; iii) Reducing risk for its economic interests; and iv) Increasing its influence in the region<sup>70</sup>. Even though it is difficult to measure the influence of a country and the risks to its economic interests, we can verify its access to natural resources through an increase in Chinese imports and exports to the continent during this period. In this sense, there was a large increase in imports of energy resources by China in 2021 compared to the first year of the pandemic (Graph 3).

**Graph 3.**

*Africa's Fuel Exports to China.*



Source: Elaborated by the authors, based on data available from the International Trade Centre (2023).

The diminishing of economic activities and restrictions imposed by the pandemic, such as store closings, limited mobility, and the industries shutdown seems to explain the reduction in fuel imports by China in 2020 and its difficulty in returning to pre-pandemic levels to the extent that the values for 2021 are still lower than 2019.

Thus, it may be noted that Beijing has not only expanded its exports to the region, especially pharmaceutical products needed to fight the pandemic in the region, but it has also expanded its access to African products, mainly fossil fuels, increasing its influence on African economies.

70. HANAUER & MORRIS (2014).



## Indian activities in Africa during the COVID-19 pandemic

India, like China, has a history of cooperation with the African continent that dates back to its independence. The SSC it provides to the region increases India's soft power, which affects issues involving the international order, such as discussions about the waiving of patents in the WTO<sup>71</sup>.

First of all, we can refer to the prestige of India, given its reputation as the pharmacy of the world due to its large production of generic medicine, which was of great value to Africa during the HIV pandemic in the 1990s<sup>72</sup>. The COVID-19 pandemic provided a new opportunity for India to intensify its relations with the African continent, given that these countries needed even more medicine and medical equipment to treat patients infected with the new disease.

Actually, Indian pharmaceutical exports increased from 2019 to 2021, which coincides with the rise of the pandemic. Table 4 below illustrates the increase in Indian pharmaceutical exports to the region (HS Code 30).

**Table 4.**

*Indian Exports to Africa of Pharmaceutical Products (HS:30).*

Product	2019	2020	2021
Medications consisting of mixed or unmixed products for therapeutic uses, among others.	US\$ 2,737,545	US\$ 3,093,575	US\$ 3,370,027
Human Blood; Animal blood prepared for therapeutic, prophylactic, or diagnostic uses, among others.	US\$ 373,311	US\$ 359,771	US\$ 447,454
Pharmaceutical preparations and derivatives in items 3006.10.10 to 3006.60.90.	US\$ 34,717	US\$ 44,013	US\$ 44,948
Medications of two or more mixed constituents, among others.	US\$ 26,690	US\$ 23,695	US\$ 31,039
Strips, gauze, bandages, and similar items, e.g. coverings, plastic adhesives, plasters, among others.	US\$ 5,244	US\$ 6,185	US\$ 6,817
Dried glands and other organs for organotherapeutic uses, in a powdered or non-powdered state, extracts, among others.	US\$ 1,316	US\$ 2,453	US\$ 6,808
<b>Total</b>	<b>US\$ 3,178,823</b>	<b>US\$ 3,529,692</b>	<b>US\$ 3,907,093</b>

Source: Elaborated by the authors, based on data available from the International Trade Centre (2023).

71. MOL *et al.* (2022).

72. GUERIN *et al.* (2020).

It is also possible to see how Indian exports of products related to fighting the COVID-19 pandemic grew constantly from 2019 to 2021 (Table 5).

**Table 5.**

*Indian Exports to Africa of COVID-19 Pandemic-Related Items (Vaccines, Test Kits, Diagnostic Instruments, and Apparatus).*

<b>Producto</b>	<b>2020</b>	<b>2021</b>
COVID-19 vaccines, test kits, instruments, and diagnostic apparatus.	US\$ 373,934	US\$ 463,312
Vaccines for human medicine.	US\$ 270,435	US\$ 358,401
Containers, jars, glassware, bottles, and other storage utensils, among others.	US\$ 37,070	US\$ 43,976
Reagents and diagnostics for laboratories.	US\$ 13,438	US\$ 32,710
Immunological products separated and stored in doses, among others.	US\$ 48,024	US\$ 24,336
Glass ampoules.	US\$ 1,947	US\$ 1,992
Culture for the development of microorganisms.	US\$ 3,020	US\$ 1,897
<b>Total</b>	<b>US\$ 747,868</b>	<b>US\$ 926,624</b>

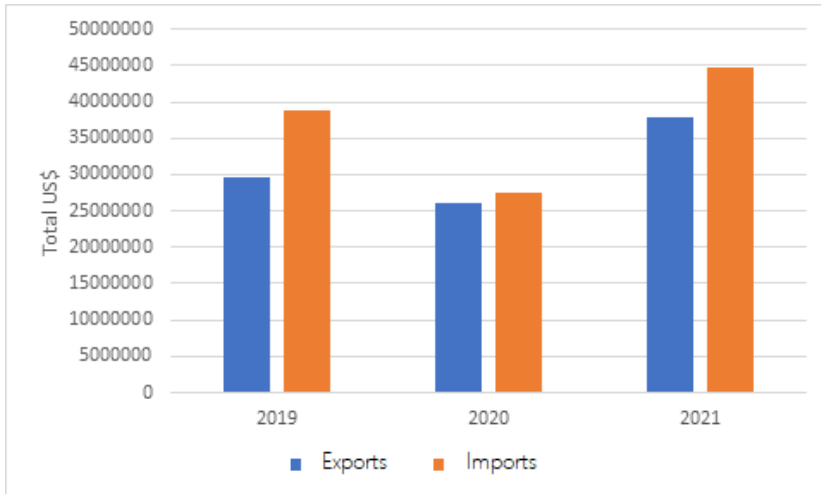
Source: Elaborated by the authors, based on data available from the International Trade Centre (2023).

Remarkably, the export of Indian pharmaceutical products gained force during the pandemic. Even though the pandemic could be sufficient to explain this increase, other relevant factors can also be considered. One of these is the nature of Indian pharmaceutical products – generics – that are less expensive and more accessible in Africa.

As with the case of China, we observe an increase in Indian imports from Africa from 2019 to 2021 (Graph 4). We also see that both flows were severely affected in 2020.

**Graph 4.**

*Bilateral Trade between India and Africa.*

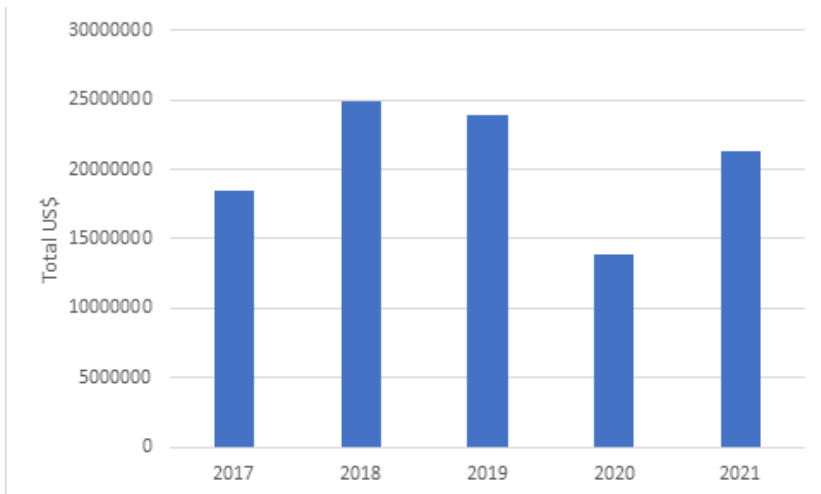


Source: Elaborated by the authors, based on data available from the International Trade Centre (2023).

As for African energy imports to India, we also note an increase after the pandemic, even though like China, the values in 2021 were still lower than before the pandemic (Graph 5).

**Graph 5.**

*Africa's Fuel Exports to India.*



Source: Elaborated by the authors, based on data available from the International Trade Centre (2023).

Analyzing vaccine donations, we see that India also supplied vaccines to the region, even though their volume was less than the donations made by China. Unlike China, whose donations were concentrated among several countries, India's distribution was more homogeneous, with similar quantities of vaccines being donated to various countries (Table 6).

**Table 6.**  
*Indian Vaccine Donations to Africa.*

Recipient	Vaccine	Developer	Donated doses	Delivered doses
Kenia	Covishield	Serum Institute of India	100000	100000
Mauritius	Covishield	Serum Institute of India	100000	100000
Mozambique	Covishield	Serum Institute of India	100000	100000
Nigeria	Covishield	Serum Institute of India	100000	100000
Uganda	Covishield	Serum Institute of India	100000	100000
Guinea	Covishield	Serum Institute of India	80000	80000
Zimbabwe	Covaxin	Bharat Biotech	75000	75000
Democratic Republic of Congo	Covishield	Serum Institute of India	50000	50000
Ivory Coast	Covishield	Serum Institute of India	50000	50000
Ghana	Covishield	Serum Institute of India	50000	50000
Malawi	Covishield	Serum Institute of India	50000	50000
Rwanda	Covishield	Serum Institute of India	50000	50000
Seychelles	Covishield	Serum Institute of India	50000	50000
Botswana	Covaxin	Bharat Biotech	30000	30000
Namibia	Covishield	Serum Institute of India	30000	30000
Niger	Covishield	Serum Institute of India	25000	25000
Senegal	Covishield	Serum Institute of India	25000	25000
Eswatini	Covishield	Serum Institute of India	20000	20000
<b>Total</b>			<b>1135000</b>	<b>1135000</b>

Source: Elaborated by the authors, based on data available from the UNICEF Covid-19 Market Dashboard.

In the case of India, this cooperation was also not limited to vaccine donations and covered other areas, especially technical cooperation based on the use of health and telemedicine apps<sup>73</sup>. Within this context, initiatives like the VidyaBharati AarogyaBharati (e-VBAB) Network Project have stood out. This program was used to provide support to African doctors through tele-consultations and training related to COVID-19. The e-VBAB program has two goals: telemedicine and tele-education services (Table 7):

**Table 7.**

*Objectives of the Indian e-VAB Program.*

Teleeducation: provide for the establishment of learning centers at selected universities in all participating African countries in the program. These centers should be equipped with the necessary infrastructure and equipment. Scholarships should be provided for medical courses and training programs.
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Telemedicine: Provide, through a specifically developed platform, telemedicine services. Selected hospitals and institutions in India should offer telemedicine, selected medical education, and teleconsultations in the selected African countries.
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Source: Embassy of India in Eritrea (2023).

As for technology and technical assistance, India also shared the *ArogyaSetu* and *E-Gram Swaraj* apps with African countries. These apps served to map COVID-19 in rural areas<sup>74</sup>. The *ArogyaSetu* app, according to the official website, functions by helping the state and public health institutions map and identify areas with potential for great proliferation of COVID-19 and also uses GPS to identify whether the app user has been in contact with someone infected with COVID-19. On the other hand, according to the official website, the *E-Gram Swaraj* app acts as an access portal for information about COVID-19, displaying the activities of health institutions about COVID-19.

India's actions are also notable due to their sending of medical professionals and supplies to African countries. Nevertheless, unlike China, which sent medical teams and equipment through conventional channels, India sent them through its military. During the pandemic, the Indian Navy provided supplies to Mauritius, the Seychelles, Madagascar, and the Comoros under the SAGAR initiative. It also used its navy to send medical teams to train African health professionals in these countries<sup>75</sup>.

73. CHATURVEDY & SHERBUT (2020); WARJRI & SHAH (2020).

74. MOI *et al.* (2022).

75. MINISTRY OF DEFENSE OF INDIA (2022).

## **A comparison of both countries' actions**

The analysis above demonstrates how each country realized and prioritized its cooperation efforts in Africa during the COVID-19 pandemic. Below, we will examine the motivations, nature, and possible consequences of these cooperation efforts from a comparative analysis perspective.

First, we can verify the interest of China and India in having access to African natural resources through the increase in imports and exports of both countries in the African continent during the analyzed period despite the impact of the pandemic on global trade. Thus, in both cases, we can verify the possible consequences of these efforts, such as strengthened relations with African countries and greater access to African markets.

In the case of India, we can verify its possible interest in increasing its soft power through health diplomacy due to its interests in the World Trade Organization (WTO) in discussions involving patents. In this instance, India presented a proposal to waive COVID-19 vaccine patents temporarily together with South Africa, and it was supported by 140 member nations, including China<sup>76</sup>. Considering the production capacity of Indian medicine, if this proposal was accepted, India could increase its production and capacity of international cooperation destined for the African continent.

This proposal was made while India supplied cooperation to African countries, and we may deduce that this could have increased its support among African nations in this international negotiation. Even though correlation does not imply causality, and even though these countries could have adopted a similar position despite Indian efforts in the continent, the leadership role of India in the Global South was prominent in coordinating the positions taken by these nations in major negotiations within the International System.

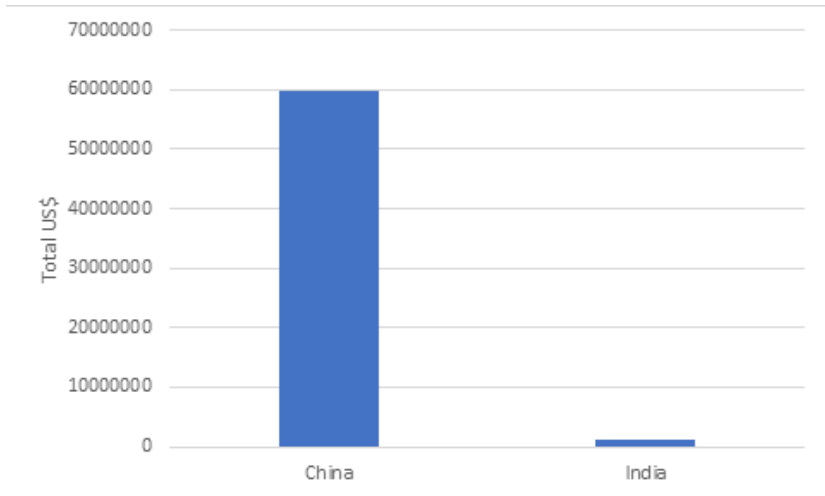
A comparison between the efforts in terms of vaccine donations by China and India, we may note a considerable asymmetry in the activities of both, which reflects the different material capacities of these countries. The graph below shows that China has a significantly greater vaccine capacity than India.

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76. BUSINESS & HUMAN RIGHTS RESOURCE CENTRE (2021).

**Graph 6.**

*Doses Donated by China and India to African Countries.*

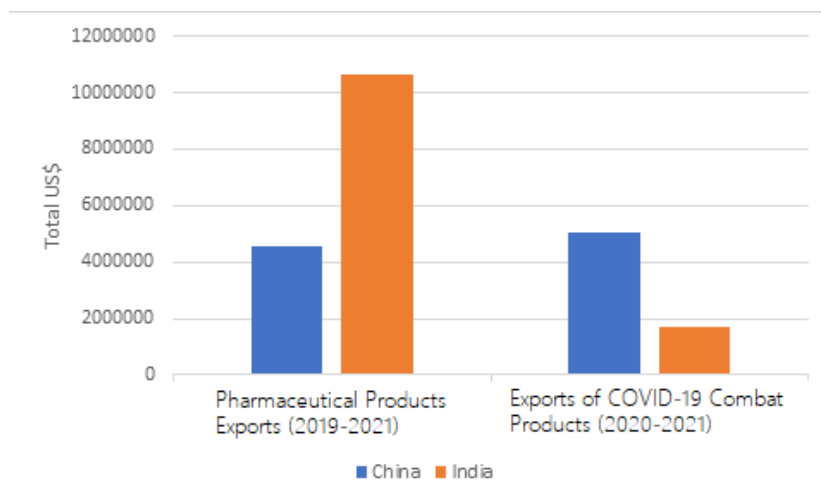


Source: Elaborated by the authors, based on data available from the UNICEF Covid-19 Market Dashboard.

In terms of the comparison between pharmaceutical exports (HS: 30) and specific products in the fight against the COVID-19 pandemic, the results indicate that while China stood out in terms of products used to fight COVID-19, in general, Indian exports surpassed Chinese exports to the continent, reflecting India's role as the largest producer of pharmaceutical products in the world.

**Graph 7.**

*Exports of Pharmaceutical Products (HS: 30) and COVID-19 Combat Items.*



Source: Elaborated by the authors, based on data available from the International Trade Centre (2023).

Finally, the table below emphasizes the convergent and divergent points of the cooperation realized by both countries in Africa based on three parameters: instruments, economic interests, and geopolitical interests.

**Table 8.**

*Comparative Analysis of China and India's Health Diplomacy.*

Parameter	China	India
<b>Instruments</b>	Focus on vaccine donation, supply of hospital materials, and debt relief	Focus on technical cooperation and supply of medicines
<b>Economic Interests</b>	Access to markets and resources	Access to markets and resources
<b>Geopolitical Interests</b>	Increase influence in the region	Increase influence in the region

Source: Elaborated by the authors.



It can be argued that altruistic motivations and the promotion of national interests do not need to be mutually exclusive. International relations, especially between developing nations, can be seen as a positive sum game with space for mutual gains. The health diplomacy of China and India, especially in Africa during the COVID-19 pandemic, seems to corroborate the broader narrative of the mutual interests of SSC in addressing the interests of the donor nation and the needs of the receiving country. After all, SSC narratives usually point to gain-gain relationships based on reciprocity, including political, economic, and other motivations in addition to altruism. Health diplomacy can be considered as an example of SSC capacity, especially when developed countries are less concerned with developing countries during a global crisis<sup>77</sup>.

This analysis demonstrates that neither of these nations is conducting health diplomacy for purely altruistic reasons to the extent that these policies represent an instrument in the power projection. China has global ambitions in conducting its health diplomacy, especially in supplying vaccines, and aspires to become an economic and technological power. It has invested heavily in the health sector, especially in the development of vaccines, which has ended up with the expansion of its exports to various markets in recent years. India's ambitions, on the other hand, are more local. Given the country's lower material capacities and its greater domestic vulnerabilities, Indian health diplomacy has focused more on technical cooperation due to the lower costs of these policies. The supply of vaccines has occurred mainly due to the nation being the principal manufacturer of the AstraZeneca/Oxford vaccine, which enables it to produce low-cost vaccines and distribute them to poorer countries.

## Conclusion

The objective of this study is to analyze how SSC in the health area has been realized by China and India in Africa during the COVID-19 pandemic. After a discussion of the historical importance of this continent for emerging Asian powers, we examined the role of health diplomacy in the foreign policies of these countries. After providing this context, we analyzed the main practices related to this type of diplomacy in Africa during the COVID-19 pandemic.

Comparing the trade flows of these nations with this region, especially in terms of pharmaceutical products, we note an increase in trade in both cases, which shows the force and importance of these relations to the countries involved. In addition to trade relations, we also analyzed the forms of cooperation that these countries use in terms of health diplomacy. We observe that China stands out in terms of vaccine donations and its sending of medical and health professional teams to various countries

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77. APOLINÁRIO JÚNIOR *et al.* (2022).

in Africa, in addition to financial assistance in the form of debt relief. India stands out regarding its health diplomacy through technical cooperation, such as telemedicine and tele-education, to educate and train doctors and other health professionals in Africa in addition to long-distance consultations. In this regard, India also shared cell phone apps to distribute COVID-19 information, as well as trace and map regions at risk of COVID-19.

Finally, as for the interests and motivations of both countries in health diplomacy, we may note the importance of geopolitical and economic issues, such as access to markets and increased influence in the region. These interests are demonstrated by the increase in exports to Africa by these Asian giants, and in the case of India, the support of African countries for these countries, especially India in major international negotiations such as the temporary waiving patents for COVID-19 vaccines in the WTO. Even though it is difficult to affirm that the health diplomacy of these nations was a causal factor for these results, we can argue that they constituted positive elements in the relations between these countries during the studied period, which may have facilitated cooperation in other areas.

Cooperation in the health area has great potential to affect the political, economic, and ideological interests of a state, and situations such as health crises of considerable proportions, like the COVID-19 pandemic, create an environment that encourages this type of cooperation. However, this analysis does not underestimate the humanitarian importance of the efforts of these countries, given that Beijing and New Delhi have helped expand access to medical materials, vaccines, and health services in African countries during a period of dire need globally. Despite the vulnerabilities of the Global South, this analysis underlines the fundamental role of health diplomacy and SSC in reducing inequalities in terms of access to healthcare around the world. Further studies are required to investigate ways to improve these practices in the international scenario. Thus, emphasizing possible political and economic interests related to these activities can help policymakers and researchers in wealthy nations examine and shed light on health diplomacy.

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