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# Chinese and Indian COVID-19 Vaccine Diplomacy during the Health Emergency Crisis

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## Abstract

Health diplomacy has played a vital role worldwide during the coronavirus outbreak. One crucial mechanism in this regard has been “vaccine diplomacy,” which describes country efforts to share COVID-19 vaccines. China and India are ahead of other countries in bilateral vaccine donations due to their South-South Cooperation policies. Looking forward, how and why are these two countries employing their vaccine diplomacy strategies? We compare the engagement of both in this field using a Comparative Foreign Policy Analysis framework. Our results suggest that neither is acting only for altruistic reasons, because economic and political interests are the main drivers behind their strategies.

**Keywords:** COVID-19, Health Diplomacy, Vaccine Diplomacy, China, India, South-South Cooperation.

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## Introduction

“Health diplomacy” has recently entered the lexicon of states and institutions, and now plays a significant role in contemporary world politics (Fazal 2020). It relates to the practices by which governments and non-state actors attempt to coordinate global policy solutions to improve global health (Paho 2021). The outbreak of the COVID-19 pandemic has been devastating in many ways, especially in developing countries (The Economist 2020). Although vaccine production has accelerated since December 2020, rich countries have consumed most of it. As of May 2021, high-income countries have secured approximately 5 billion doses and vaccinated one-quarter (Europe) and one-third of their populations (North America). Meanwhile, low-income nations have only secured around 270 million doses, resulting in much lower vaccination rates: 12.82% in South America, 4.48% in Asia, and 1.01% in Africa (Su et al. 2021).

There has been a startling lack of solidarity among countries, particularly when overcoming vaccine inequality became imperative to fighting the pandemic effectively (The Lancet 2021). Some argue that vaccine donations are probably the most efficient alternative for reducing inequality in terms of vaccine access (Su et al. 2021). Hence, “vaccine diplomacy” has become one of the solutions players have had at their disposal to reduce these discrepancies and face the global health crisis<sup>1</sup>. Among various countries able to conduct vaccine diplomacy, China and India, notably, have major COVID-19 vaccine manufacturing industries and are ahead of other countries - especially wealthy countries - in terms of donating them globally (Unicef 2021 - updated: May 24th, 2021). They are responsible for donating 15,137,000 and 9,015,000 doses respectively, which is almost 90% of all country donations outside of the Covax Facility framework (idem). Vaccine donations, then, are considered an essential foreign policy asset in both countries’ regional and global strategies (Dhar 2021; Yang 2021; Zhu 2021). Therefore, this paper’s main question is: “How and why are China and India using COVID-19 vaccine diplomacy as part of their foreign policy strategies?”

Through a comparative methodology examining China’s and India’s foreign policies, we analyze their engagement in terms of their similarities and differences in their activities related to vaccine donations. Our central premise is that comparison is an essential tool in approaching topics and processes related to the field of Foreign Policy Analysis (FPA)<sup>2</sup> (Beasley et al. 2012; Breuning 2007), especially within the international cooperation landscape (Milani 2012).

The international aid literature identifies moral and humanitarian purposes, political-diplomatic objectives, and economic interests as the main reasons why a country would provide foreign aid (Degnbol-Martinussen and Engberg-Pedersen 2003). In this paper, we consider specific variables related to these dimensions. Regarding geopolitics, we consider the participation of recipient countries in regional integration projects sponsored by China and India, such as the Belt and Road Initiative (BRI) and the South Asian Association for Regional Cooperation (SAARC), respectively, and the significant security and strategic issues surrounding them. The economics, in turn, encompass commercial ties, focusing on the trade dependency of the vaccine recipient countries, which is operationalized in the form of the trade exports they share with China and India. Finally, in terms of the humanitarian dimension, we focus on per capita income, COVID-19 cases, and COVID-19 related deaths in the recipient countries. Therefore, the analytical framework

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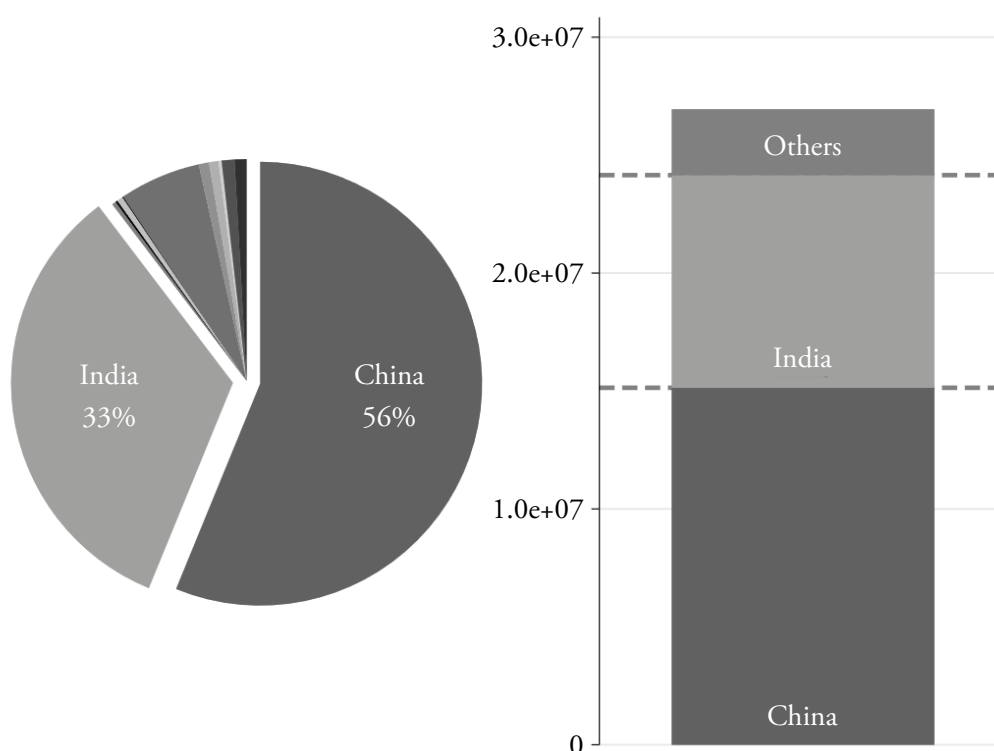
<sup>1</sup> We use this expression to refer to vaccine donations made amid the COVID-19 pandemic. Engaging in a conceptual and normative debate about vaccine diplomacy is beyond the scope of this paper. For a more specific work on this theme, see Su et al. 2021.

<sup>2</sup> There are many reasons why political scientists compare countries and institutions and many ways to do so (Landman 2008). We focus on a more qualitative comparative foreign policy analysis despite the many virtues of different approaches. To begin such an investigation, one must ask why a state makes certain decisions in foreign affairs and how its foreign policy may have developed from these decisions, and then use this information to look for discernible patterns (Kaarbo 2012). In this sense, our investigation is better described as “case-oriented” since its core relies on the specific unfolding of events and variations in political developments within each country. By intentionally limiting the number of countries that we are researching, the method sacrifices the broad generalizations of comparing many countries but gains a deeper understanding of the cases that feature in its small-N qualitative analysis (Landman 2008).

combines a qualitative approach with the cross-referencing of empirical data, which allows us to explain these outcomes through our conjectures and descriptions.

The data for vaccine donations comes from the UNICEF COVID-19 Vaccine Market Dashboard (Unicef 2021)<sup>3</sup>. The data on Chinese and Indian trade flow export partners (2019) is available at World Integrated Trade Solutions (WITS, World Bank); participation in regional integration projects led by China and India relates to the BRI and SAARC initiatives; GDP per capita comes from World Bank Development Indicators; and the total amount of coronavirus cases and deaths come from Johns Hopkins (December 31, 2020, Johns Hopkins University - Our World In Data)<sup>4</sup>.

**Graph 1. Countries vaccine doses donations: Pie chart (left, %) and graph bar (right, quantity)**



Source: Unicef 2021, countries vaccine donations. Updated: May 24<sup>th</sup>, 2021

The findings suggest that both countries prioritize regional and economic partners through bilateral channels, and neither is acting exclusively for altruistic reasons. Vaccine diplomacy allows China and India to boost their soft power<sup>5</sup>, showcase their technological and vaccine manufacturing prowess, gives their firms footholds in new markets<sup>6</sup>, and lets them boast to their

<sup>3</sup> In our analysis, we consider only vaccine donations, and not vaccines provided through commercial transactions.

<sup>4</sup> We used Stata 17 for the graphs and Excel for the maps.

<sup>5</sup> It is the ability to co-opt rather than coerce (in contrast to hard power). In other words, it is the ability to shape the preferences of others through appeal and attraction (Nye 2021).

<sup>6</sup> Sinovac is the leader in selling vaccines worldwide, with a total of 848 million doses delivered to 48 countries as of May 2022. See: [https://bridgebeijing.com/our-publications/our-publications-1/china-covid-19-vaccines-tracker/#China8217s\\_Vaccines\\_in\\_Asia](https://bridgebeijing.com/our-publications/our-publications-1/china-covid-19-vaccines-tracker/#China8217s_Vaccines_in_Asia)

domestic audiences that they are significant players in today's world politics (Pande 2020; Yang 2021; Zhu 2021). China, in particular, displays broader global ambitions in providing vaccines to developing countries across several regions. In contrast, India is more regionally focused, and does not seem to use it as an instrument to project power outside its neighborhood.

These movements also highlight how China and India are viewed within the current international order, which is undergoing significant changes (Kitchen and Cox 2019). The World Health Organization's (WHO) limitations in coordinating efforts to fight the pandemic and reduce vaccine access inequality through Covax suggests that there is a crisis in the multilateralism upon which the liberal international order led by the United States is based (Soares de Lima and Albuquerque 2020).

This crisis in multilateralism is also being associated with the decline of liberal democracies and has gained strength with the rise of nationalism in the 21<sup>st</sup> century, especially under Trump's unilateral diplomacy<sup>7</sup>. On the other hand, some authors<sup>7</sup> argue that autocratic countries may be performing more efficiently in fighting the pandemic (Sorci et al. 2020; Cepaluni et al. 2021), although Western views have become more unfavorable in terms of how China has handled the situation domestically (Silver et al. 2020). Therefore, vaccine diplomacy has become an important test not only for these two Asian giants but also in terms of the competition between democratic and non-democratic systems, their soft power, regional rivalries, and the liberal international order.

Following this introduction, this study will consist of a brief discussion on the International Development Cooperation (IDC) field and health diplomacy, and will then make a comparison of the Chinese and Indian vaccine diplomacy case studies. We will conclude with our final remarks, which will summarize our main findings and point out possible ways to continue this investigation.

## International Development Cooperation, Health Cooperation, and Vaccine Diplomacy

Among the many modalities of IDC<sup>8</sup>, health cooperation has recently gained prominence mainly due to the outbreak of the COVID-19 pandemic. Within this context, supplying medical products is considered a valuable form of foreign aid (Hattori 2001). A set of practices in this particular topic have been conceptualized as health diplomacy, which refers to a range of issues such as donations

<sup>7</sup> Since the beginning of the pandemic, the WHO has been under attack. Some of its foremost critics have been Donald Trump (US) and Jair Bolsonaro (Brazil), who have accused the organization of complying with China's wishes - for instance, delaying the declaration of the pandemic and tolerating China's refusals to receive inspectors to trace the origin of the virus - and recommending policies that infringe on peoples' civil liberties, such as wearing masks and imposing lockdowns. See: <https://www.bbc.com/news/health-52679329>

<sup>8</sup> Although there is no consensus in the literature regarding the best way to define the concept of International Development Cooperation, it usually encompasses terms such as foreign aid, Official Development Assistance (ODA), North-South Cooperation, and South-South Cooperation (SSC). The concept also encompasses the activities of public and private actors designed to assist countries and societies through donations, subsidized loans, debt forgiveness, techniques, and knowledge transfer.

or transferring specialists, equipment, medicine, and vaccines to other countries (Adams, Novotny, and Leslie 2008, Fazal 2020). Health diplomacy occupies the interface between international health assistance and international political cooperation. It may be defined as a political change agent that meets the dual goals of improving global health, while helping repair failures in diplomacy, particularly in areas of conflict and resource-poor countries (Singh 2017).

Modern international cooperation in the health field dates as far back as the 19<sup>th</sup> century. Over time, efforts to tackle common diseases, such as the plague and yellow fever, have led to international treaties and conventions such as the Pan-American Health Organization in 1902 and the WHO in 1948 (Hortez 2012). Today, the concept of global health diplomacy also includes solo or coordinated initiatives sponsored by countries to prevent the spread of infectious diseases, which have made it a relevant tool in analyzing the engagement of countries which seek recognition in international politics. China and India, in particular, have gained prominence in this field through their South-South Cooperation (SSC) activities<sup>9</sup>. Among these activities, the donation of vaccines has been paramount, which raises questions about the motives and drivers behind them since both have become significant donors, especially to the Global South.

One of the most explored questions in the foreign aid debate is about purposes. Ethical and humanitarian concerns, geopolitical objectives, and economic interests are primary reasons experts indicate to explain the providing of aid (Degnbol-Martinussen and Engberg-Pedersen 2003; Lancaster 2008; Van der Veen 2011). This particular research agenda has analyzed the relationship between idealistic and pragmatic motives (Alesina and Dollar 2000; Guljarani and Swiss 2017; McKinley and Little 1977; Pino 2006). However, one can argue that altruistic motives and the promotion of national interests do not need to be mutually exclusive, because countries can be supportive while they pursue foreign policy goals (Inoue and Vaz 2013; Milani 2018).

Investigating health diplomacy within the COVID-19 pandemic context provides a case study for evaluating bilateral and broader relations, since both Northern and Southern countries have been playing the role of donors of medical products (Hayakawa and Imai 2021). Fuchs et al. (2020) investigated the economic and political factors associated with China's exports of medical equipment during the first two months of the pandemic. Tellas and Urdinez (2020) analyzed the political determinants behind Chinese donations of masks to Latin America and the Caribbean. Hayakawa and Imai (2021) examined the bilateral trade patterns of medical products traded among several countries, investigating their political and economic determinants. We contribute to these ongoing debates by comparing the cases of China and India and analyzing their vaccine donation diplomacy amid the COVID-19 pandemic.

Since the first successful development of a vaccine against COVID-19, the access to this vital asset has been unequal for countries from the Global North and South. One can observe two significant currents within this context: vaccine *diplomacy* and vaccine *nationalism*. The latter best

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<sup>9</sup> China and India, in particular, have gained prominence in the International Development Cooperation (IDC) field through their SSC activities over the past few decades (Besharati and Esteves 2015; Rinaldi and Apolinário Júnior 2020).

represents Donald Trump's approach (Zhu 2021) since the United States, among other countries in the Global North, has prioritized and concentrated efforts on its domestic needs. It was the first country to conclude agreements with pharmaceutical companies to purchase vaccines (in quantities that often exceeded the national population) and employed export restrictions. The former involves diplomatic efforts to distribute COVID-19 vaccines globally, either via donations or by providing loans to purchase them.

However, vaccine providers need to obtain political support for their international actions domestically. Countries like India still have high levels of contamination and COVID-19-related deaths, which has stimulated a debate as to whether these resources should be used only domestically. Emphasizing the political and economic gains of these activities could help strengthen the domestic case for vaccine diplomacy. Regardless of whether they are the result of empathy, health justice, or pure vaccine diplomacy, donations can positively affect ever-increasing vaccine inequality. Therefore, rather than diminishing the significance of bridging vaccine inequality via donations, both of these countries deserve praise in light of their results.

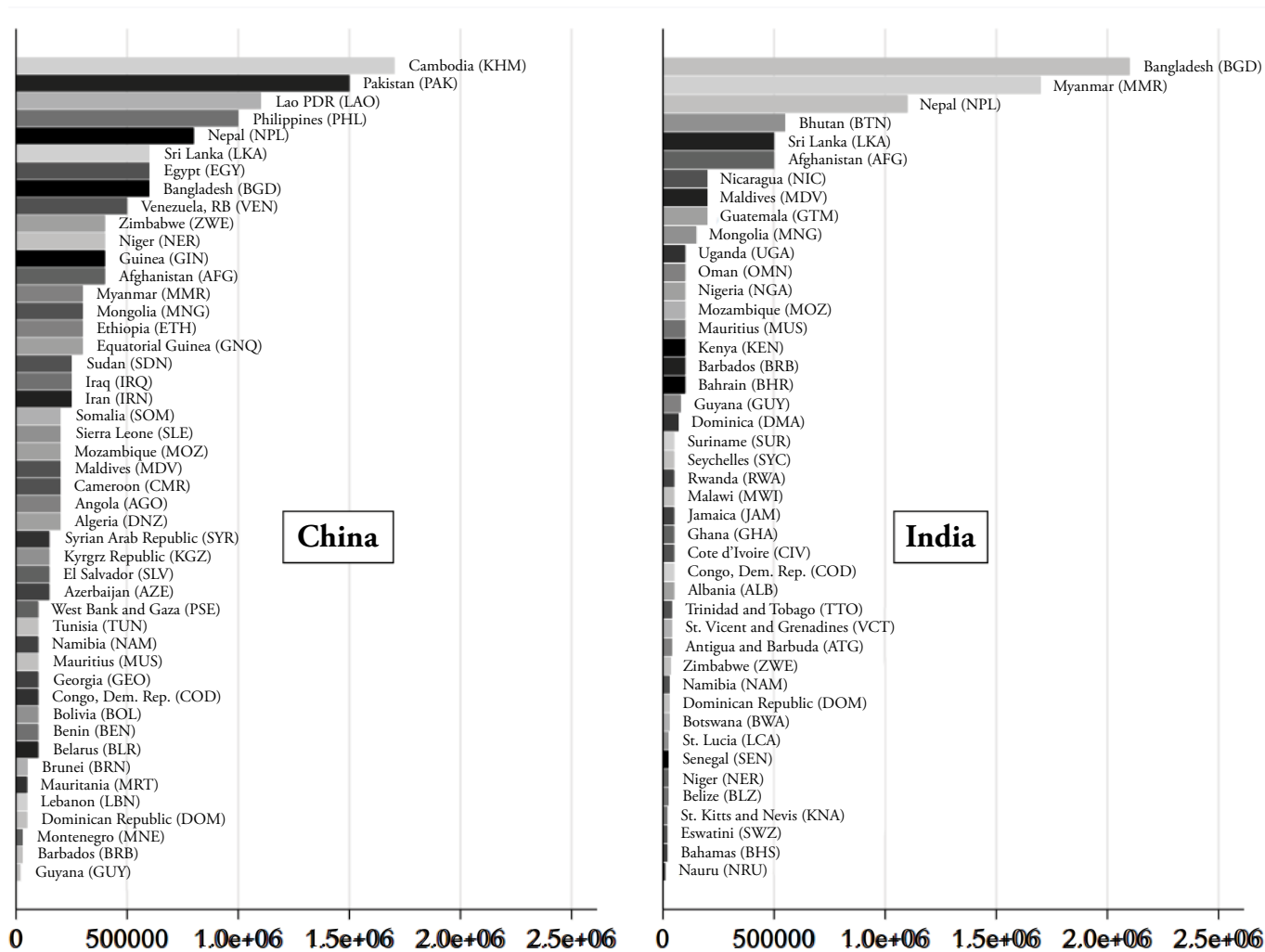
## The Chinese and Indian Covid-19 Vaccine Donations Diplomacy

In the global governance arena, the Covax Facility, the vaccine-sharing scheme funded by rich countries (The Economist 2020) and led by the WHO and members such as UNICEF, international civil society, and other countries, has already shipped 71,756,930 doses of COVID-19 vaccines to 125 countries: 74.15 million doses have been released for shipment and 149.52 million doses have already been ordered as of May 24, 2021 (Unicef 2021). Besides Covax, China and India are ahead of other countries in terms of bilateral vaccine donations worldwide, and are responsible for 15,137,000 and 9,015,000 doses respectively, which represents almost 90% of all government donations (idem, May 24). In this scenario, China and India have become significant players, especially in the developing world, since vaccines are now considered an essential foreign policy asset within the current coronavirus health crisis.

### China's vaccine diplomacy

The People's Republic of China is currently the second largest economy in the world in terms of US dollars and the world's largest in terms of PPP (World Bank 2021). After three decades of double-digit economic growth, neighboring and regional countries are increasingly linked to China through international trade and investment ties (Ikenberry and Lim 2017). China's rapid economic rise has secured it the title of an emerging regional and global power (Pu 2019). Academics, journalists, and politicians have debated the potential impacts that China's rise can have on global governance based on an analysis of its performance in various international arenas (Oliveira and Leite 2014; Oliveira and Lessa 2014; Vu 2017; Zeng and Breslin 2016).

**Graph 2. Recipient countries of China (left) and India (right): Vaccine doses donations quantities, receptors names and labels**

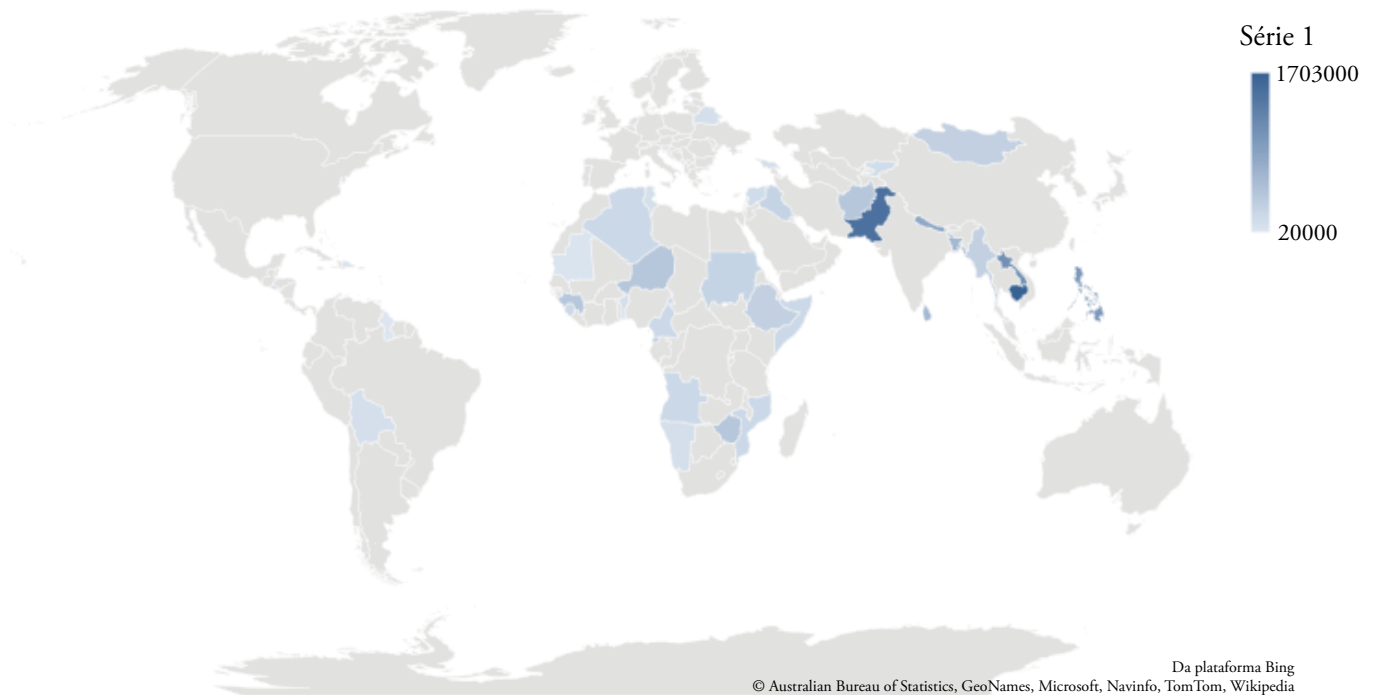


Source: Unicef 2021, China and India vaccine donations. Updated: May 24<sup>th</sup>, 2021.

Since the outbreak of the pandemic, Beijing has been in the spotlight. To respond to these challenges, Xi Jinping declared that China would pursue an initial diplomatic strategy of donating masks and respiratory equipment to countries in need. The second stage entailed a rush to find and develop an efficient vaccine against the new coronavirus. In May 2020, at a WHO meeting, Xi stated that his country’s efforts would be considered a “global public good.” Chinese officials have also promised many developing countries priority access to their vaccines, and after it developed domestic vaccines, the Chinese Foreign Ministry announced that China will provide free doses to 69 countries and commercial exports to 28 more (Huang 2021).

The Asian giant has donated vaccines to 47 countries in Eurasia, the Middle East, Africa, and Latin America, but most of the beneficiaries are located in the Middle East and Africa (Unicef 2021, May 24<sup>th</sup>). The Beijing Institute of Biological Products or “CNBG” and Sinovac are the main distributors of the donated Chinese doses. They have also manufactured their licensed vaccines: the former producing them under the label of “BBIBP-CorV,” and the latter as “Coronavac.”

**Figure 1. China’s vaccine recipients map (doses donations quantity)**



Source: Unicef 2021, China vaccine donations: recipient’s countries. Updated: May 24<sup>th</sup>, 2021.

CNBG represents 89% (BBIBP-CorV) and Sinovac 11% (Coronovac) of the Chinese donations. Considering both vaccine prices, estimated at US\$ 29.75 for each dose, China has donated \$ 399,750,750 and \$ 50,575,000 worth of doses (Unicef 2021). On several occasions, these donations have resulted in more vaccines being distributed (Zhu 2021). The table below displays the summary statistics of the variables that we have cross-referenced graphically.

**Table 1. China descriptive statistics**

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min.</b>	<b>Max.</b>
Donation	47	322063.8	364734.5	20000	1703000
Export Share	46	.4873891	.1353927	.2265	.7927
Gdp per capita	45	9968.018	11265.27	808.133	71809.25
Covid cases	47	129279.6	219407.9	41	1225142
Covid deaths	47	3187.255	8350.243	0	55223

Source: Vaccine donations (Unicef, 2021), GDP (WDI, 2020 by OWID), Exportations partner share (WITS, 2019), and cases and deaths (JSSE, 2020 by OWID). Elaborated by the authors.

The pandemic gave China the chance to act based on the principles of international cooperation, to “pursue an ideal world where the Great Way rules for the common good, respecting the principles of good neighborliness and harmony in relation with other countries, advocating cooperation and mutual help” (PRC 2021, s.p.). This is a power mechanism for China to place itself as a source of peaceful development in the Global South (Vaz-Pinto 2014; Vadell, Brutto and Leite 2020). Vaccine

diplomacy allows China to use its production prowess and health technology to expand its influence, especially in developing countries. For Beijing, this particular foreign policy strategy is the next logical step in the “Road to Health” evolution proposed in March 2020. In addition to increasing its soft power (BeCARD and Menechelli Filho 2019; Liu and Tsai 2014), it has sought to link its vaccine distribution to the advancement of significant projects within the Belt and Road Initiative (Zhu 2021). The BRI is framed as a necessary component of the world’s post-coronavirus economic recovery, and the “Silk Road of Health” has an important place among China’s foreign policy strategic goals.

The BRI was announced in 2013 by Xi Jinping and is considered by some scholars to be the most striking international policy enterprise launched by the Chinese government in recent years (Jones and Zeng 2019; Liu, Xu and Fan 2020). Several analysts interpreted it as a clear Chinese strategy to produce a more multipolar global order, challenging the United States’ domination of global governance, thus relocating the world’s center of power in Asia (Bondaz 2015; Cohen 2015; Smith and Fallon 2020). However, the Chinese government has made an effort to present BRI, and the rise of China in general, as non-threatening, non-revisionist, and non-confrontational, as a contrast to the rise of other powers, such as Japan and Germany which engaged in warfare as they rose to prominence during the middle of the last century (Ward 2017; Pu 2019). The Chinese media accordingly publicized the initiative as implementing the concept of “the peaceful rise of China” coined by Zheng Bijian fifteen years ago (Bondaz 2015). Despite these efforts, some scholars continue to characterize the current international order as a “new Cold War” or a resumption of a bipolar world (Bremmer 2020; Mearsheimer 2019).

The new coronavirus pandemic has been understood as an obstacle to countries receiving investments and implementing projects, because many have become indebted and have not been able to pay back the loans they already have. In addition, restrictions on travel and trade have choked off the supply of Chinese workers, equipment, and supplies needed to complete these BRI projects. As a result, countries such as Sri Lanka, Pakistan, and Kyrgyzstan, and several African countries have asked China to postpone or forgive debts due in 2020. In April 2020, the G20 allowed 73 nations to suspend interest payments on debts, but analysts currently consider permanent debt relief unlikely. That is one reason critics have referred to the BRI lately as a “debt trap” project (Brautigam 2020).

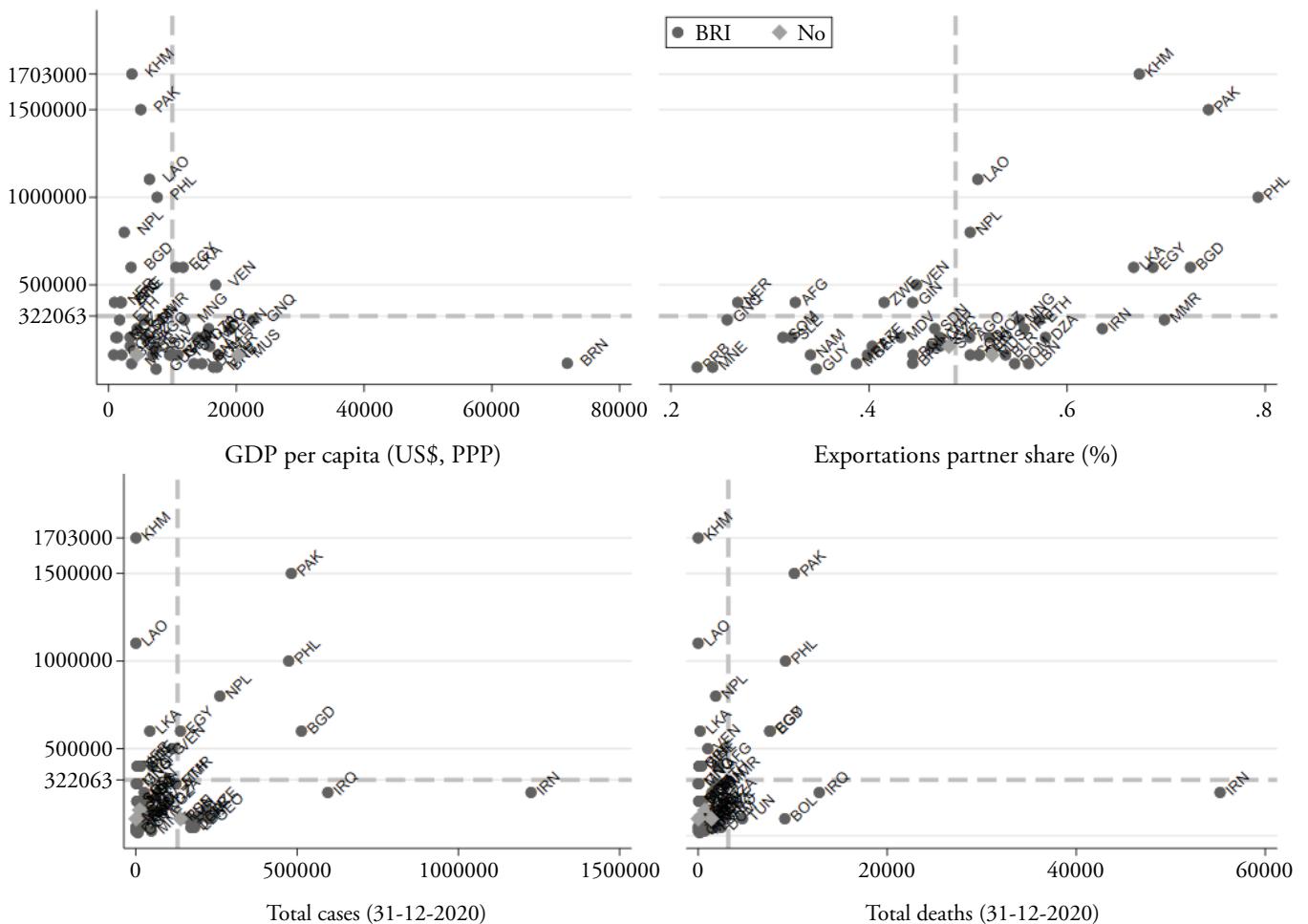
These cooperation activities have also occurred under the strategy pursued by China to increase its influence along the main oil routes from the Red Sea and the Persian Gulf to the South China Sea. This approach has also been called the “String of Pearls.” China itself has never used this term officially, however<sup>10</sup>. The String of Pearls is a political and military initiative aimed to provide the Chinese navy with easy access to several ports strategically distributed along the main oil routes from the Arabian Sea to the South China Sea. In other words, it is a series of air and naval bases, commercial ports, and intelligence centers strategically positioned by China to form a “rope” to trap India and control four crucial areas, namely the Somali, Arabian, Malay and Indochinese peninsulas (Khurana 2008).

<sup>10</sup> This term was first used in an internal U.S. Department of Defense document entitled “Energy Futures in Asia” (Brewster 2014)

More specifically, the initiative encompasses control of the ports of Colombo and Hambantota in Sri Lanka; Gwadar in Pakistan; Chittagong in Bangladesh; Madae Island in Myanmar; and Port Victoria in Seychelles. These ports serve as support for the maritime dimension of the New Silk Road. This “strangulation” or “encirclement” strategy seeks to increase the already predominant Chinese influence in Asia and has caused some consternation among other countries in the Asia-Pacific, especially India, which find themselves increasingly in the shadow of Chinese advances in the region. For Beijing, this port infrastructure represents an arc of projection of its vital interests to guarantee its food and energy security, consolidating its ongoing influence in the region (Brewster 2017). Some of these countries show up as recipients of the first and second tier of China’s donations as we can see below, with the means of the x and y axes indicated by the grey dashed lines.

Graph 3 presents the relationship between China’s vaccine donations and the recipient nations’ per capita GDP (top, left), export share (top, right), COVID-19 cases (bottom, left), and deaths related to COVID-19 (bottom, right), with the means of the x and y axes being indicated by the grey dashed lines. The first finding is that practically all vaccine recipients

**Graph 3. China doses donation receivers on GDP per capita (top, left), exportations partners share (top, right) and Covid-19 cases (bottom, left), and deaths (bottom, right)**



Source: Vaccine donations until May 24<sup>th</sup>, 2021 (Unicef, 2021), GDP (WDI, 2020 by OWID), exportations partner share (WITS, 2019), and cases and deaths until December 31<sup>st</sup>, 2020 (JHU CSSE, 2020 by OWID). Elaborated by the authors.

are countries included in the BRI project. The exceptions are Syria, Mauritius, and Palestine. Secondly, it is possible to identify a negative relationship between GDP per capita and vaccine donation, meaning that the poorest countries are being prioritized. Third, the results suggest a positive association between vaccine recipients and commercial ties, which indicates that countries that are more dependent on China in terms of trade received more vaccines. Finally, there seems to be a positive although not as clear relationship between the number of COVID-19 cases and deaths and the vaccine recipients.

It is worth noting that GDP per capita and trade are related negatively and positively respectively to the vaccine donations. Thus, the graph expresses a clear pattern of donations and balance sheet dependency on China: the top-tier vaccine recipients are the least developed countries (LDCs) and rely mainly on China products. This pattern is straightforward with Cambodia (KHM), Pakistan (PAK), Laos (LAO), and the Philippines (PHL). This pattern is repeated in the second tier with Nepal (NPL) and Bangladesh (BGD), although Sri Lanka (LKA) and Egypt (EGY) are slightly above the GDP per capita average. It is also interesting to notice that Cambodia (KHM), Laos (LAO), and Sri Lanka (LKA) are below average in terms of cases and deaths related to COVID-19. These results shed light on this donation diplomacy altruism and its economic motivations: the preferential vaccine recipients are LDCs, which have not suffered more from the COVID-19 crisis than other vaccine recipients, and are clearly heavily economically dependent on China.

## India's vaccine diplomacy

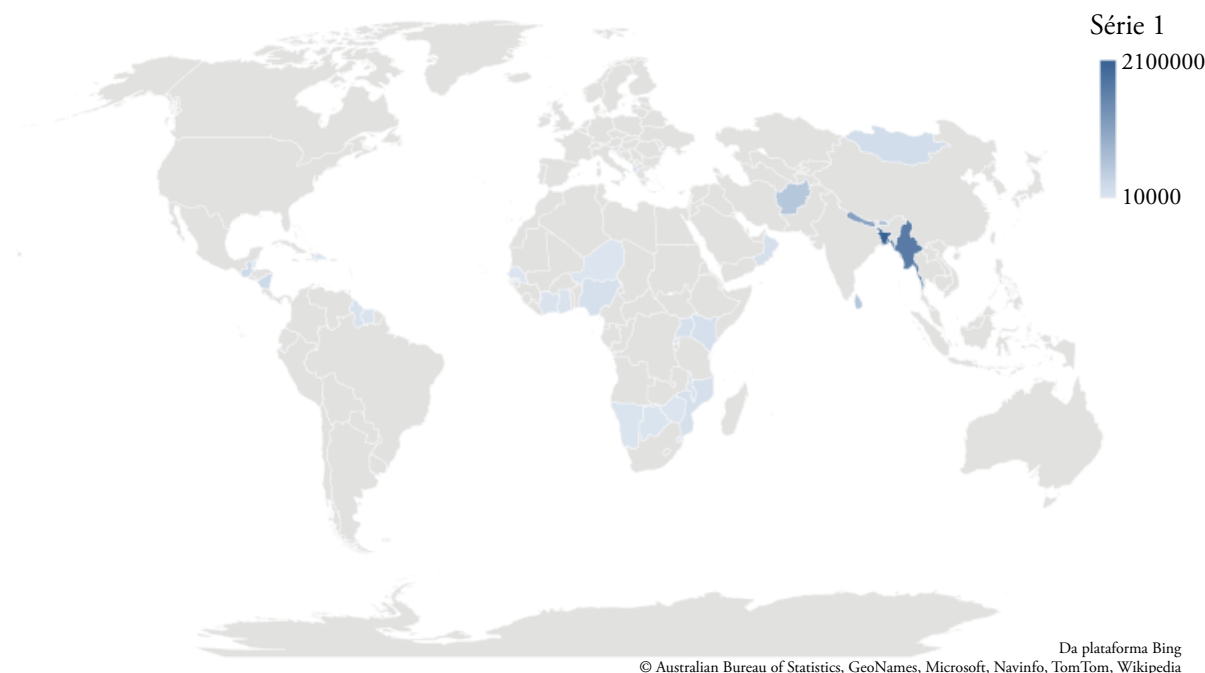
Regarding India's vaccine diplomacy activities, it launched its "*Vaccine Maitri*"<sup>11</sup> or "Vaccine Friendship" approach in the beginning of 2021 (MEA 2021; Sharma and Varshney 2021). Initially devised to strengthen New Delhi's relations with regional neighbors within the context of growing Chinese influence, it has expanded rapidly (Singh 2021). Indian Foreign Minister S. Jaishankar has stated that *Vaccine Maitri* envisions generating great international goodwill towards India (The Indian Express 2021).

According to Pattanaik (2021), 67% of the medicine produced in India is exported to developing countries, and 50% of essential medications distributed worldwide by UNICEF come from India. At the outbreak of the current pandemic, India took the lead in responding to the challenges and announced a total of US\$ 1 billion in assistance to around 90 countries to fight COVID-19 (Gupta 2020). In 2020, India represented 20% of world vaccine production and met nearly 60% of global demand for this product (Sahay 2020).

India has 44 countries on its donation list (Unicef 2021, May 24th). Although the national pharmaceutical firm Bharat Biotech is the developer and manufacturer of the Covaxin vaccine, it only represents 3% of total donations. The remaining 97% belong to the AstraZeneca/Oxford vaccine manufactured by the Serum Institute of India. Both manufacturers have lower

<sup>11</sup> For more information, consult: <<https://mea.gov.in/vaccine-maitri.htm>>.

**Figure 2. India’s vaccine recipients map (doses donations quantity)**



Source: Unicef 2021, India vaccine donations: recipient’s countries. Updated: May 24th, 2021.

vaccine production prices compared to the Chinese ones. Covaxin’s estimated price, for instance, is US\$ 4 for each dose, and Covishield’s mean price is around US\$ 6.59<sup>12</sup>. As a result, India bought \$ 1,020,000 and \$ 35,040,000 worth of donations from Bharat Biotech and AstraZeneca respectively<sup>13</sup>. Narendra Modi’s government has recently displayed more limited vaccine diplomacy, concentrating its donations on India’s nearest neighbors in South Asia, although some African and Latin American countries have received a small share of doses. Table 2 below displays the summary statistics of the variables we have cross-referenced graphically.

**Table 2. India descriptive statistics**

Variables	N	Mean	Std. Dev.	Min.	Max.
Donation	44	204886.4	424107.1	10000	2100000
Export Share	42	.3160167	.2320577	.0092	.8661
Gdp per capita	43	11143.1	10174.11	808.133	43290.71
Covid cases	43	48586.81	91497.29	32	513510
Covid deaths	43	748.2326	1439.527	0	7559

Source: Vaccine donations (Unicef, 2021), GDP (WDI, 2020 by OWID), Exportations partner share (WITS, 2019), and cases and deaths (JSSE, 2020 by OWID). Elaborated by the authors.

<sup>12</sup> This value is the mean of three prices registered in the vaccine dashboard (Unicef 2021).

<sup>13</sup> Estimate based on multiplying the vaccine dashboard price (Unicef 2021) by the number of doses donated.

When Narendra Modi was appointed Prime Minister (PM) for the first time in 2014, among the many promises and commitments that he made in his inaugural ceremony was that India's neighbors would be first on New Delhi's diplomatic radar (Ramachandran 2014). Later called the "Neighbors First" approach, it consisted of two primary targets for very different reasons: South Asia and China. South Asian countries have historically been considered to be vital for Indian geopolitical and economic interests as they share vast territorial and maritime boundaries and have a common civilizational heritage. Based on the "*Rajamandala*" concept first articulated by the ancient Indian philosopher Kautilya, India sees itself regionally and globally from the perspective of concentric circles. In this image she occupies the center and each layer moves forward from the subcontinent across the globe. So, the immediate neighborhood is paramount. India aims to cultivate friendship and respect with bordering countries and seeks to prevent external powers from aligning or backing regional states at the expense of India. From the "Indira Doctrine" to "Neighbors First," the South Asia region is primordial in Indian foreign affairs (Pande 2020).

However, from Modi's perspective, this region was disregarded for a long time, especially during the Cold War. Most concerned with principles such as "non-alignment" and "strategic autonomy," New Delhi focused on leading the Third World and following a "unique" path in international affairs, which led to its neighbors receiving scant attention. Since the 1990s though, as new domestic and external challenges have arisen, South Asia has gained renewed importance to meet these challenges, particularly its relationships with Pakistan and China.

The China issue, in turn, is quite different. As mentioned before, since the rise of China in the 21<sup>st</sup> century, mainly after the launching of BRI, the relationship between the two Asian powers has experienced ups and downs. Aside from a territorial dispute that goes back to the 1962 war, today's main controversy concerns Beijing's incursions in South Asia, especially through commercial and investment ties with Pakistan, and a possible encirclement of India by the Chinese "String of Pearls." The outbreak of the coronavirus pandemic has intensified these concerns, with vaccine diplomacy representing another critical chapter in this dispute.

Two principles that Modi and Jaishankar have pointed out to guide current Indian foreign policy are "*Samriddhi*" (shared prosperity) and "*Suraksha*" (regional and global security) (BJP 2015). Both ideas express the region's importance to New Delhi's prosperity and security, and they encompass access to capital, technology, and energy, regional integration via infrastructure projects, and a pacific and stable region open to trade, foreign investment, and workforce immigrants<sup>14</sup>. For example, India's regional diplomacy includes a direct line of credit defined as a "development partnership" instead of using the term "aid"<sup>15</sup> (Pattanaik 2021). Under Modi, foreign policy serves economic development and international prestige (Hall 2019).

<sup>14</sup> "India receives \$ 79 billion a year in remittances, the largest of any expatriate group in the world, and this contributes to 3.5 percent of India's GDP" (Pande 2020, 171).

<sup>15</sup> One specific policy in this sense is the Line of Credit and High Impact Community Development Projects (HICDP), which has changed the relationship between India and its neighbors. New Delhi stands as a player willing to help those countries in need, especially after natural disasters or severe economic crises. Another example is Humanitarian Assistance and Disaster Relief (HADR), a national body that offers

The stable, pacific relationship with South Asia is crucial because India aspires to be a significant regional player (Amorim and Silva 2014). The PM first resorted to the SAARC, trying to gain leverage as the biggest economy and main driver for regional integration. In a virtual meeting in 2020, New Delhi proposed a SAARC COVID-19 Emergency Fund, in which each country would voluntarily contribute and the resources would be destined to measures and policies designed to fight the pandemic and its externalities. India has contributed \$ 10 million - around 50% of the total amount - and as of April 2020, the Fund had a sum of \$ 21 million with the pool of contributions coming from seven member countries. Soon after, India utilized \$ 1.7 million of the total to send medicine (SAARC 2020).

In the same vein, Modi displayed a willingness to revive the Indian Ocean Rim Association to enhance cooperation with the countries and islands of the Indian Ocean (Mohan 2015). Even though leaders and practitioners have welcomed these initiatives, most of them have encountered internal and external resistance to their full implementation through the association (idem).

Facing difficulties in implementing this regional, multilateral agenda, New Delhi opted for mini-lateral or bilateral initiatives. The Bangladesh, Bhutan, India, and Nepal Working Group (BBIN), the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), and the South Asian Subregional Economic Cooperation (SASEC) Group represent the principal hallmarks of this more focused diplomatic choice.

On one hand, the projects and proposals for regional integration support India's development needs and improve infrastructural connectivity with its neighbors, especially Nepal and Bangladesh. This concern is mainly due to China's BRI. Over time, China has increased its presence in the region, and it has become clear to New Delhi that the BRI poses a significant challenge to its interests. China's potential to gather support from areas as vital to India as South Asia and the Indian Ocean sounded a red flag in New Delhi due to the massive presence of Chinese capital. As Hall (2019) argues, Indians worry that the BRI could make South Asian countries economically dependent on China, plunging some into debt traps making them vulnerable to accepting diplomatic bargains. As a response, Modi eventually decided to take a public stand against elements of the BRI and has put forward measures to compete for economic and diplomatic advantage in the region.

On the other hand, the main geopolitical concerns are the hazards surrounding the "String of Pearls" and security challenges regarding territorial borders, terrorism, and migration. To face potential Chinese threats and the United States' presence in the Middle East and Southeast Asia, Indian leaders acknowledge that a geopolitically united subcontinent is critical. In this sense, New Delhi needs to devise a regional foreign policy predicated on its geographic advantages, economic complementarity with its neighbors, and historic role as the primary regional provider of security. As stated above, within the current context of the pandemic, the notion of national

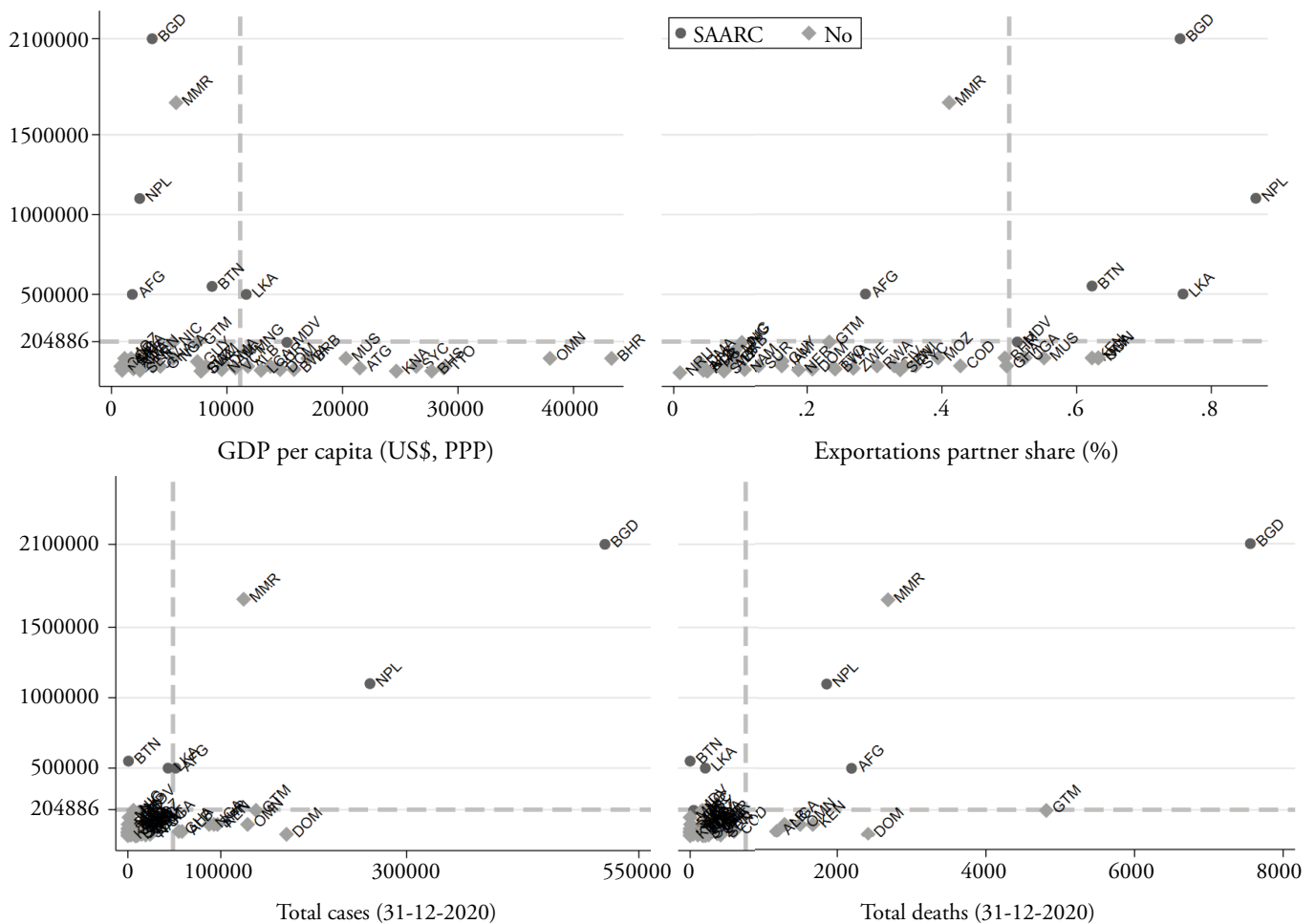
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aid and relief. In 2005, Pakistan received \$ 25 million to handle the damage from a hurricane; Bangladesh and Nepal, in 2008 and 2015 respectively, were granted funds to do the same. In 2018, India assisted the Rohingya minority which is being persecuted by the Myanmar government (Pattanaik 2021).

security has changed and now incorporates a health dimension. Vaccine doses, and adequate health infrastructure are considered to be the best weapons to fight against the virus and prevent the region from turning to nationalist and protectionist policies. Thus, the Indians have rapidly turned their attention to their immediate neighbors to help them meet these new challenges. The next graph maintains the same quadrant format as the Chinese one, with the grey dashed lines indicating the means of the x and y-axes.

Graph 4 shows how Indian vaccine donations have clearly been regionally focused and its vaccine diplomacy has been driven by geopolitical and economic factors: among the top recipients of Indian donations, most are considered to be least developed countries (LDCs) with low GDP per capita. However, the pattern indicates that some countries are out of tune with one another. First, although Sri Lanka (LKA) is positioned right on the mean GDP of donation recipients, and Bhutan (BTN) and Afghanistan (AFG) below it, the two former countries are highly dependent on Indian exports, while Afghanistan is not. Second, for the top-tier vaccine recipients, Bangladesh (BGD), Myanmar (MMR), and Nepal (NPL) are the

**Graph 4. India doses donation receivers on GDP per capita (top, left), exportations partners share (top, right) and Covid-19 cases (bottom, left) and deaths (bottom, right)**



Source: Vaccine donations until May 24<sup>th</sup>, 2021 (Unicef, 2021), GDP per capita (WDI, 2020 by OWID), exportations partner share (WITS, 2019), and cases and deaths until December 31<sup>st</sup>, 2020 (JHU CSSE, 2020 by OWID). Elaborated by the authors.

ones mostly in tune with donation altruism and economic drives: all of them are LDCs, all of them have more cases and deaths than the recipient average, and they also depend significantly on India's products. It is noteworthy that Bangladesh and Nepal belong to the SAARC but Myanmar does not, at least formally, and it has fewer COVID-19 cases than Nepal. Last but not least, it is far from a coincidence that the primary recipients are India's nearest neighbors, reaffirming its regional donation strategy. Three out of five in the top tier also belong to the BBIN Working Group: Bangladesh, Bhutan, and Nepal.

As stated above, to meet the geopolitical and economic imperatives presented by the rise of China and its willingness to lead the region, India has taken the opportunity that the pandemic has created to support its significant partners and boost its regional leadership and soft power to even the scales against China (Amorim and Silva 2014; Manzi and Lima 2021). Acting as the "first responder to a health crisis", New Delhi adopted two primary responses: first, it revived the SAARC as the leading forum to formulate a regional action plan to fight the pandemic, and second it relied on bilateral pacts such as the BBIN, to help its neighbors by providing testing kits, medical equipment, and vaccines.

Therefore, the data illustrates an interesting conundrum present in the IDC literature: although Indian vaccine diplomacy meets the challenges posed to the most vulnerable countries in the region, they also have strong economic ties with India, which thus blurs the line between altruism, economic, and geopolitical drives. As our analysis shows, cooperation in delivering vaccines remains an essential pillar in India's regional diplomacy, and it has used this vital asset to strengthen its regional position and articulate a response to one of the most challenging issues in current world affairs.

## Final remarks

The two Asian giants have mainly targeted developing nations through bilateral channels when it comes to vaccine diplomacy. The results of our investigation indicate that there are evident geopolitical and economic interests in their vaccine allocation, since the top five recipients for both countries are regionally and economically linked to the donor nations through commercial associations. However, China's and India's approaches differ, especially regarding scope and operationalization (Table 3).

According to our analytical framework, the Chinese display a more global ambition in providing vaccines to developing countries across many regions as part of a broader geopolitical strategy, best illustrated by the BRI. These diplomatic efforts encompass an interest in expanding Chinese clients for their products, investments, technology, and workers. On the other hand, India's ambition is regionally focused and is not being used as an instrument to project power outside South Asia. However, it seeks to establish close links with regional neighbors to gain leverage in commerce, investments, and political support.

**Table 3. China and India Geopolitical and Economical Framework Comparison Factors on Covid-19 Vaccine Donations**

Dimensions	Similarities	Differences
Geopolitical context	1. Vaccines and health materials global powers 2. Vaccine donation boosting soft power with regional associations strategies: BRI and SAARC members	1.a. China: vaccine developer (CNBG and Sinovac) and manufacturer for donations 1.b. India mostly manufacturers (Serum Institute) for donations 2.a. Going global and broader scope: China 2.b. Going regional and focused scope: India
Economic interests	China and India's top receivers: highly economically dependent countries (HED); Bangladesh, Nepal, and Sri Lanka (within both top ten).	China's top receivers (not India's top): Cambodia, Pakistan, Laos, Philippines, and Egypt. India's top receivers (not China's top): Myanmar (Exception case: outside bloc), Bhutan, and Afghanistan.
Humanitarian concerns	China's and India's top receivers: Least developed countries (LDC)	China top receivers vary more in covid contaminations and deaths than India top tier

Elaborated by the authors

Both countries also have recipients in common within their top ten, namely Nepal, Bangladesh, and Sri Lanka, which raises the question of how competitive their foreign policy strategies are, and sheds light on the possible political effects of vaccine diplomacy. In addition, India's peak COVID crisis raised a red flag to some who believed that India should have tended to its own population first, especially considering an estimated excess death toll of perhaps 2.3 million deaths in May 2021 - when the monthly total reached 200,000 official deaths<sup>16</sup>.

The situation involving contamination and deaths also leads us to consider the humanitarian dimension. The data shows that the primary recipients of vaccine donations from China and India are least developed countries (LDCs), which points to some degree of cooperation between donors and the needs of their partners. However, the Chinese recipients vary in terms of contamination and not so much in terms of death, while Indian rates are above the mean in both indicators. Therefore, there may be a possible convergence of political and economic determinants in the allocation of Chinese and Indian vaccines.

One can argue that altruistic motivations and the promotion of national interests do not need to be mutually exclusive. International relations, especially between developing countries, can be seen as a positive-sum game with room for mutual gains. They seem to corroborate the broader South-South Cooperation's (SSC) mutual interest narrative of addressing the donor's interests and the recipient's needs. After all, the SSC narrative claims to be a win-win relationship based on reciprocity, including political, economic, and other motivations besides altruism. Hence, vaccine diplomacy may be a robust case study that displays the strength of South-South Cooperation when developed countries are least

<sup>16</sup> <https://www.economist.com/graphic-detail/coronavirus-excess-deaths-tracker>

bothered about developing countries, especially when considering the limitations of the Covax project in guaranteeing equal access to vaccines for rich and poor nations alike<sup>17</sup>.

Our analysis shows that neither nation is conducting vaccine diplomacy based on pure charity, and this diplomacy represents an instrument for projecting power. Both countries prioritize bilateral channels instead of relying on multilateral institutions. China has global ambitions in providing vaccines to developing countries across regions, and it aspires to become an economic and technology giant with unrivaled R&D and manufacturing capabilities. It has invested heavily in vaccine development, clinical trials, and marketing to achieve this goal, which ultimately won it orders for hundreds of millions of doses. China's vaccine diplomacy, together with BRI, also aims to export jobs, technology, and supply chains. India's ambition, on the other hand, is more regional. India's role in vaccine diplomacy is based on its being the prominent manufacturer of the AstraZeneca/Oxford vaccine, which allows it to produce low-cost vaccines and distribute them to its neighbors with little resistance domestically. The country's vaccine diplomacy is conducted by balancing aid and commercial sales. The main point is that, when it comes to an understanding of the current international order and the impact of COVID-19 on nations and institutions, China and India are too important to be ignored.

Finally, these findings should not be seen as downplaying the humanitarian significance of these donor efforts, as Beijing and New Delhi have helped expand vaccine donations to LDCs in light of the rampant vaccine access gap. Despite the Global South's vulnerabilities, the results underscore vaccine diplomacy's instrumental role in bridging vaccine inequality worldwide. Future research is needed to investigate ways to improve donations among developed nations, especially those hoarding surpluses. We believe that stressing the possible political and economic interests related to these activities could help stimulate policymakers and researchers in vaccine-rich countries to examine and shed more light on the vaccine diplomacy issue.

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<sup>17</sup> We are indebted to an anonymous reviewer for pointing this out.

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