

Indo-Pacific Security and Geopolitical Challenges for QUAD: Leveraging Health Diplomacy for Strengthening Peace and Development

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Abstract

This paper examines the geopolitical and security challenges faced by the Quad alliance in the Indo-Pacific region in general and for health diplomacy in particular. It explores the origins and revitalization of the Quad alliance in response to shifting geopolitical circumstances. The paper argues that leveraging health diplomacy can significantly contribute to fostering peace and development in the Indo-Pacific. By utilizing health diplomacy as a tool, the Quad alliance can address immediate public health crises and strengthen regional healthcare systems. This approach includes sharing best practices, facilitating vaccine distribution, enhancing healthcare infrastructure, and promoting research and development collaboration. Furthermore, the paper argued that the Quad's commitment to health diplomacy can enhance its credibility and legitimacy as a cooperative mechanism for addressing security and geopolitical challenges. The main argument of this paper highlights the potential of the Quad's health diplomacy initiatives to contribute to peace and development in the region, ultimately fostering cooperation and stability among Quad members and other stakeholders.

Keywords: Indo-Pacific, Security Challenges, Geopolitical Challenges, Health Diplomacy, Peace and Development.

Introduction

The Quad (Japan, India, the United States, and Australia) was founded in the aftermath of the 2004 Indian Ocean earthquake and tsunami. These four countries joined together to form a regional core group to help with humanitarian relief in the Indo-Pacific region (CNN, December 29, 2004). The Quad has played a key role in rebranding the Asia-Pacific region as the "Indo-Pacific" in order to strengthen trans-regional engagements between the Indian and Pacific Oceans in order to deal with an assertive and belligerent China on the Asian and African continents (Asia Pacific Foundation of Canada, 2020). Furthermore, QUAD was formed to better deal with economically powerful China in the Indo-Pacific region, where great power rivalries, massive military investments, social inequality, and contemporary land and maritime territorial disputes, as well as nuclear programmes, have rendered the region an 'Arc of Turbulence.' As a result, geopolitical manoeuvrings in the Indo-Pacific have had an impact on regional health security, peace, and development. As a consequence of the outbreak of COVID-19, the critical situation had prompted the establishment of the QUAD Vaccine Partnership.

Health security and geopolitics have emerged as critical dynamics of International Relations (IR) in the aftermath of COVID-19. As a result of these dynamics, geostrategic and geopolitical alliances and counter-alliances emerged. Finally, these two dynamics have had a significant impact on regional peace and global developments in general, and the Indo-Pacific in particular. Furthermore, in recent years, pandemics and epidemics have been influenced by security and geopolitical dynamics. The same thing has happened in the context of COVID-19. Security concerns have arisen as a result of the vaccine/health diplomacy, leading to the emergence of Indo-Pacific regional geopolitical dynamics.

For the establishment of national, regional peace and development, professional health workers from all over the world must participate in multilateral health governance. It is possible to realise both the "right to health" and the "right to peace" including human rights through the development of effective policies and actions that support health education in nonviolence, intergroup dialogue, and social justice.

The promotion of health security, peace, and development, as well as the process of changing a culture of violence into a culture of peace and development, are all areas in which the health diplomacy has the potential to play a significant role. Health professionals should make it a priority to develop the diplomatic abilities required to contribute to the process of establishing and maintaining peace and development while working cooperatively on a multilateral level to achieve the goal of "health for all." The Sustainable Development Goals (SDGs) of the United Nations (UN SDGs) include several interconnected goals, including SDG-3 on health, SDG-10 on inequality reduction, SDG-16 on peace, justice, and strong institutions, and SDG-17 on sustainable development. The larger area of global health diplomacy and the other types of diplomacy that are used within the health domains are shaped by the dynamic interactions that exist among these variables, such as health, peace, development, and inequality. How can a regional organisation use health diplomacy to advance development, peace, and health security in general, and the COVID-19 in particular?

In order to find the objectives of the paper, some existing literature has been reviewed. According to scholars Upadhyay (2021) and Mehra (2022), health diplomacy can serve as a means of soft power in the region. This study suggests that enhancing QUAD's cooperative processes can facilitate the coexistence of its cooperative and competitive approaches in the area. This approach effectively integrates security and development objectives. Kien (2021) and Malhotra (2022) conducted a study on health security within the QUAD framework. The scholars emphasised the importance of improved collaboration and coordination in the realm of health. Sharma's (2023) study provides insights into how QUAD nations leverage their strengths to enhance information sharing and technological collaboration. A helpful tool for pandemic readiness. Miller's (2023) study provides an analysis of health security in the Indo-Pacific region and evaluates the effectiveness of the QUAD approach in addressing health concerns. This text highlights how the Covid-19 pandemic has revealed the rapid spread of viruses across borders, surpassing the speed of warfare. This has been noted by several researchers. Quad's success hinges on establishing a cohesive and comprehensive framework for future cooperation. This piece provides insights into Indo-Pacific security concerns, the QUAD's involvement, and the potential of health diplomacy.

QUAD'S Origin: Geopolitical Rationales

The 2004 natural disaster served as the impetus for the four democracies in the Indo-Pacific region to come together and establish a soft security agreement for humanitarian and disaster assistance cooperation. In order to explain this development, the term "a new style of diplomacy" was coined (Prakash, 2020). Once the relief efforts were complete, the Tsunami Core Group was disbanded, but not before the template had proven itself effective as a means of addressing regional concerns (Buchan et al., 2020). A thought was germinated, and as it grew, members were compelled to pursue more conventional forms of security cooperation based on shared geopolitical interests and a shared understanding of threats. In 2006, Japan was the first to propose the idea of a "sweeping arc of freedom and prosperity" (Ambrigo, 2021) that would include multiple nations committed to free expression, democratic governance, free markets, and human rights.

As part of a joint statement released during Indian Prime Minister Manmohan Singh's visit to Japan, the two countries expressed their eagerness to begin discussions on issues of mutual interest with other like-minded nations in the Asia-Pacific region (Buchan et al., 2020). The Japanese Prime Minister Shinzo Abe addressed the Indian parliament over the issue of "confluence of the two seas." This idea is intended to form the foundation for a future in which Asia as a whole develops into a free-flowing, transparent network spanning the entire Pacific Ocean, including the United States and Australia (Ambrigo, 2021).

As a result, China criticised the formation of the Quad, claiming that its members were trying to encircle China. It has also lodged a formal protest with all four countries involved, as reported by Varadarajan (2007). In contrast, the group opted to label themselves as informal, as argued by Buchan et al. (2020). Their conversations centred on subjects that were mutually engaging, including disaster relief. The absence of clear objectives and aims for the Quad gave room for critics to dwell on unrealistic assumptions, such as the possibility of it evolving into an "Asian NATO" (Madan, 2017) or becoming a security alliance. Nevertheless, the

endeavours concerning Quad were relinquished due to alterations in leadership among the members, concerns about the possible economic consequences from China, and the prioritisation of other significant national concerns. According to Smith's (May 27, 2021), China perceives the Quad's stance towards it as a reflection of a "Cold War" mentality, and this perception persists to this day.

In contrast to China's perspective, the Australian Defence Minister, Brendan Nelson, expressed during his visit to Delhi in July 2007 that Australia's preference was to confine the Quad to matters concerning trade and culture. In line with this, it was emphasised by Manmohan Singh, the Prime Minister of India, that the Quad should not limit itself to security concerns (Chellaney, 2007). The Quad's second iteration was a result of the confrontational approach taken by US President Donald Trump towards Beijing. The Quad countries have been increasingly aligned in their efforts to promote peace, stability, and prosperity in the Indo-Pacific region. This is evident in their focus on connectivity, sustainable development, counter-terrorism, non-proliferation, and maritime and cyber security. These arrangements aim to address the challenges posed by the region's growing interconnectedness. (Cheok et.al., 2021). As for the QUAD, there seems to be widespread agreement that China is extending its reach in the Indo-Pacific Region across various domains, such as politics, economics, society, and military affairs (Kliem, 2020).

Indo-Pacific: Geopolitical Rebranding

The Indo-Pacific region holds significant geopolitical importance due to its economic strength, strategic positioning, and security considerations. The developments in the Indo-Pacific region have a significant impact on global politics, trade, and security as major powers compete with each other for regional hegemony. The region in question serves as a crucial link between the East and West, and holds significant influence as a power hub. Its control over key waterways such as the Strait of Hormuz, Strait of Malacca, and South China Sea has a direct impact on global trade flows, energy supplies, and overall security. The Indo-Pacific region boasts some of the world's most significant and rapidly expanding economies, including China, India, and Japan. The strategic location of the Strait of Malacca and South China Sea, which connects the Indian and Pacific Oceans, has made it a crucial global trade hub. The economic potential and growth of the region has made the region for the intense competition for giants such as the United States and China in the Indo-Pacific region. The Indo-Pacific's significance in power balance is evident through China's increasing assertiveness in the South China Sea, its BRI infrastructure projects, and the U.S. pivot to the region. The region and beyond have been significantly impacted by security concerns such as territorial disputes, terrorism, piracy, natural disasters, climate change, South China Sea tensions, North Korea's nuclear ambitions, and Afghanistan's war. Regional frameworks have been established in the Indo-Pacific to enhance cooperation and tackle common security challenges, both conventional and non-conventional. The ASEAN and Quad are regional initiatives aimed at fostering stability, economic integration, and the rule of law in the region through bilateral and multilateral efforts.

QUAD countries are working together to promote a liberal and open Indo-Pacific region. This new framework is expected to improve their efforts and provide a more accurate representation of the area. A rebranding initiative was decided upon after a careful evaluation

process that included gathering input and feedback from neighbouring countries. This modification is expected to increase cooperation and collaboration among all Asia-Pacific nations. Beijing has chosen to stick to the traditional Asia-Pacific framework instead of adopting the newer Indo-Pacific region terminology. The Asia Pacific region has been renamed as the Indo-Pacific due to changes in the geopolitical landscape. The discussion about the Indo-Pacific region's geopolitical situation has been ongoing for a century. In the 1920s, Karl Haushofer, a well-known German geo-politician, coined the term "Indo-Pacific" in his publications on geography and geopolitics. The author wrote several works on geopolitics, including *Geopolitics of the Pacific Ocean* (1924), *Building Blocks of Geopolitics* (1928), *Geopolitics of Pan-Ideas* (1931), and *German Cultural Politics in the Indo-Pacific Space* (1934). Li (2022) states that the US was seen as a German ally in the effort to challenge Britain and Western Europe's naval dominance. The alliance aimed to create an "Indo-Pacific" region with anti-colonial factions in India and China.

China is challenging India's influence in the Indian Ocean. India has been using the term Indo-Pacific frequently since 2010. The term became important in the Indian Government since 2010 (Scott, 2012). Since 2011, Australia, Japan, and the US have regularly referred to the region as the "Indo-Pacific" among strategic analysts and senior government/military leaderships. The term was initially used in Australia's Defence White Paper in 2013. It is connected to the Quadrilateral Security Dialogue, which is a non-binding partnership of democratic countries in the region comprising Australia, India, Japan, and the United States (Mishra & Das, 2019). The term "Indo-Pacific" has gained popularity in geopolitical discussions since 2011, according to Medcalf (2022). In 2019, the US Department of State introduced the idea of a "Free and Open Indo-Pacific" among members, a group of four Indo-Pacific democracies led by the US, along with Australia, India, and Japan. This was documented by the US Department of State. The term "Indo-Pacific" is frequently used in important US strategic documents, including the 2017 National Security Strategy, the 2018 Nuclear Posture Review, and the 2018 National Defence Strategy.

The Indo-Pacific concept originated from the Asia-Pacific geopolitical dynamics. China is thought to be located in the Indo-Pacific region. According to Felix Heiduk and Gudrun Wacker from the German Institute for International and Security Affairs, the Indo-Pacific is seen as a containment strategy led by the US against China. Biden called for a "secure and prosperous Indo-Pacific." Tamer believes that the Indo-Pacific is a geopolitical challenge posed by the U.S. to China, which has gained traction in international relations. (Tamer, 2021)

China is the dominant military power in the Indo-Pacific region and has a growing quantitative and technological advantages over other countries in the area. China is building military facilities in the South China Sea and Tibet, suggesting that a more aggressive approach on part of China is being pursued. India and other QUAD countries along with regional countries have been sharing common views on threats, values, and challenges, leading to geopolitical dynamics in the region. Realists support a containment strategy that could lead to conflict, as China's peaceful rise may not be as it seems (Roy-Chaudhury & de Estrada, 2018: 181-194). China's rapid ascent in the economic, technological, military, and political arenas has caused significant geopolitical shifts, both regionally and globally, particularly in the Indo-Pacific. The tremors of the same are now visible and their aftershocks are also being felt

globally. Some scholars argue that effectively handling China's aggressive diplomacy is crucial for upholding safety, security, and stability in the Indo-Pacific region (He & Li, 2020).

The significance of security and geopolitical dynamics in the region has been amplified by the COVID-19 pandemic. The Quadrilateral Security Dialogue is discussing China's assertive stance in the region. India, Japan, and Australia are seen as balancing powers in the Indo-Pacific region due to their growing influence. The Quad members have begun engaging in diplomatic activities related to this matter. PM Australia Morrison recently had discussions with US Vice President Kamala Harris and US President Joe Biden regarding arrangements, (Scott, March 5, 2021). On March 12th, the first virtual Summit Meeting was presided over by US President Joe Biden. (The White House (2021). The Quad has formed three new working groups: the Quad Climate Working Group, the Quad Critical and Emerging Technology Working Group, and the senior-level Quad Vaccine Experts Group, as part of their ongoing development (Ministry of Foreign Affairs, Japan, March 13, 2021). The QUAD countries are collaborating to distribute COVID-19 vaccines to Indo-Pacific countries. This is part of a larger strategy to counter China's influence. The plan was discussed during the Summit Meeting. (Sevastopulo & Kazmin, 3 March 2021). India persuaded three other countries to invest in its vaccine production capacity. In March 2021, The Quad made a commitment to take action in response to the negative impact of COVID-19 on both the economy and health. This information was reported by The White House.

China's Health Diplomacy towards the Indo-Pacific: Geopolitical Concerns

The Chinese government's commitment to international initiatives to broaden the reach of China's health diplomacy is an example of its "smart power." China's health diplomacy has been and will remain a crucial part of the country's foreign policy as it seeks to increase its geopolitical influence in the international community and the Indo-Pacific region. In terms of global health, China had already emerged as a major player by 2015 (Tang et al., 2017), contributing significantly to both Overseas Development Assistance (ODA) and Development Assistance for Health (DAH), voicing concern over the transnational spread of infectious diseases, participating in global health governance, and engaging in the free and open sharing of knowledge and technology around the world.

The primary objective of Beijing is to establish itself as a responsible great power. According to Rudolf (2021), different countries under the sphere of China's influence have collaborated to address contagious illnesses like MERS and SARS by working together with medical facilities, the healthcare sector, and gaining entry to Chinese markets. From 2012 to 2014, China implemented an unparalleled reaction to the Ebola outbreak in West Africa. The nation deployed military personnel, comprising medical officers, public health specialists, and doctors, to journey to West Africa.

Following the outbreak of Covid-19, China has intensified its endeavours to present itself as a painstaking global health leader. This was achieved through the initiation of a public health initiative, known as the Health Silk Road, which was executed in partnership with nations from the Association of Southeast Asian Nations (ASEAN), Arab League, Central and Eastern Europe (17+1), and various other international organisations. The endeavour in question constitutes a component of China's health diplomacy strategy, aimed at positioning itself as a

preeminent figure in the domains of worldwide healthcare and security (Rudolf, 2021a). The Chinese government extended liberal support to various nations, including those in the Indo-Pacific region such as Malaysia and the Philippines, by providing medical aid and consultation. Enterprises, including Huawei and China Communications Construction Company, were capable of making a contribution towards the provision of medical provisions. The Jack Ma Foundation and the Alibaba Foundation have distributed aid packages to numerous countries, such as the United States, Uganda, and Ukraine. In response to the disaster, China has extended financial aid to several affected countries, such as Sri Lanka, through a concessional loan amounting to 500 million dollars (Lancaster, Rubin, & Rapp-Hooper, 2020). China has executed a strategy known as "mask diplomacy," whereby it provided masks and medical kits to a significant number of nations. Facial coverings were dispatched from the Xinjiang Autonomous Region to nations with predominantly Muslim demographics, such as Afghanistan, Egypt, Iran, Iraq, Lebanon, and Jordan. The People's Liberation Army dispatched military personnel to convey medical assistance provisions across Southeast Asia, encompassing nations such as Laos, Cambodia, and Myanmar (Rudolf, 2021). China has extended aid supplies to countries that have not yet established diplomatic relations with it, with a particular focus on Latin American nations. In order to be eligible for financial aid from Beijing, the opposition party in the legislative body of Paraguay has been advocating for the cessation of diplomatic relations with Taiwan. According to Rudolf (2021), Belize received supplementary materials through donations from purportedly non-governmental organisations (NGOs) based in China.

Vaccine research was initiated by China as early as with the outbreak of pandemic in January 2020. The aforementioned collaborations facilitated the amalgamation of the assets of governmental research establishments with the production capacities of pharmaceutical corporations. Furthermore, China has initiated vaccine trials in various global regions, such as Latin America, Africa, and the Middle East. The Chinese government has classified its vaccines as "Public Goods" and has accordingly ensured that countries in Africa and Southeast Asia receive priority vaccine access to them. Furthermore, the Chinese government has extended vaccine assistance to developing countries.

In the Asian region, China has provided a significant number of vaccine doses to various countries. Cambodia has received one million doses, while Myanmar and Laos have each been allocated three hundred thousand doses. Additionally, Brunei and Nepal have also received considerable numbers of vaccine doses, among other countries. China has extended its philanthropic gesture by offering a contribution of vaccine doses to various African nations, such as Equatorial Guinea, the Congo, Sierra Leone, among others. According to Yang's (2021), the Middle Eastern nations of Iraq, Lebanon, and Syria have received vaccine donations of a relatively modest nature. Furthermore, China is currently endeavouring to establish the Digital Silk Road as a means of monitoring contact details and enforcing quarantine protocols. The present endeavour is aimed at facilitating other nations in their efforts to oversee quarantines and categorise populations, with the ultimate goal of promoting the safe revival of local economies (Lancaster et al., 2021). China has set its sights on achieving economic and technological dominance by leveraging its research and development and manufacturing capabilities. A key objective of China's global agenda is to address the demand for vaccines in

developing nations worldwide. By utilising this tool of soft power, China will have the capacity to enhance its position within the global arena.

The growing influence of China in global institutions, particularly the World Health Organisation, has been increasingly conspicuous in recent times. The geopolitical vacuum and economic slump created by the Trump administration's withdrawal from its global leadership position enabled Beijing to assert its position, underscore the inadequacies of democracies, and establish itself as a global health leader (Gauttam, Singh, & Kaur, 2020). China's vaccine diplomacy has been subject to criticism due to its perceived conditionality and employment of power to exert geopolitical sway. According to a scholarly publication by the Yusof Ishak Institute in Singapore, China's "vaccine diplomacy" is not devoid of conditions, and it is plausible that Beijing may leverage its vaccine contributions to promote its regional interests, particularly on contentious matters such as its territorial claims in the South China Sea (Yeremia and Raditio, 2020). The expanding influence of China within international organisations, such as the World Health Organisation (WHO), has been a notable development. The withdrawal of the Trump administration from its global leadership position has enabled Beijing to assert its position and underscore the inadequacies of democratic systems. This has further facilitated Beijing's emergence as a prominent global health leader. The aforementioned occurrence resulted in a void in the geopolitical landscape, accompanied by a downturn in economic activity (Gauttam, Singh, & Kaur, 2020).

Quad Health Diplomacy: Vaccine Partnership as a Bridge for Peace and Development

The Health as a Bridge for Peace (HBP) is a comprehensive policy and planning framework that was officially endorsed by the 51st World Health Assembly in 1998, as an integral component of the "Health for all in the 21st Century" strategy. The framework in question traces its origins to the fundamental principles of human rights, humanitarianism, and medical ethics. The present concept provides support to the health architecture and healthcare personnel in delivering the necessary healthcare and security services in conflict and post-conflict scenarios, thereby facilitating the process of peace-building. According to the World Health Organisation (WHO), the HBP is characterised as the assimilation of peace-building apprehensions, notions, principles, tactics, and implementations into health relief and health sector development. The fundamental essence of this framework lies in the crucial need to embrace peace-building approaches in order to secure enduring health benefits in contexts characterised by political, civil, and social unrest, as well as intricate emergencies arising from either natural or human-induced disasters.

The QUAD's vaccine partnership and distribution initiative represents a concerted effort towards the attainment of health and well-being objectives (SDG-3), with the added benefit of reducing vaccine and general inequity (SDG-10). This endeavour also contributes to the promotion of peace, justice, and institutional strengthening (SDG-16), as well as sustainable development through the sharing of technology, provision of quality higher education, and sustainable climate practises.

According to the Alma Ata Declaration (1978) by the WHO, the attainment of "health for all" is contingent upon the advancement of the society and economy of the respective country or region. The concept of security has evolved beyond its traditional military connotation to encompass a broader range of considerations, such as economic prosperity and

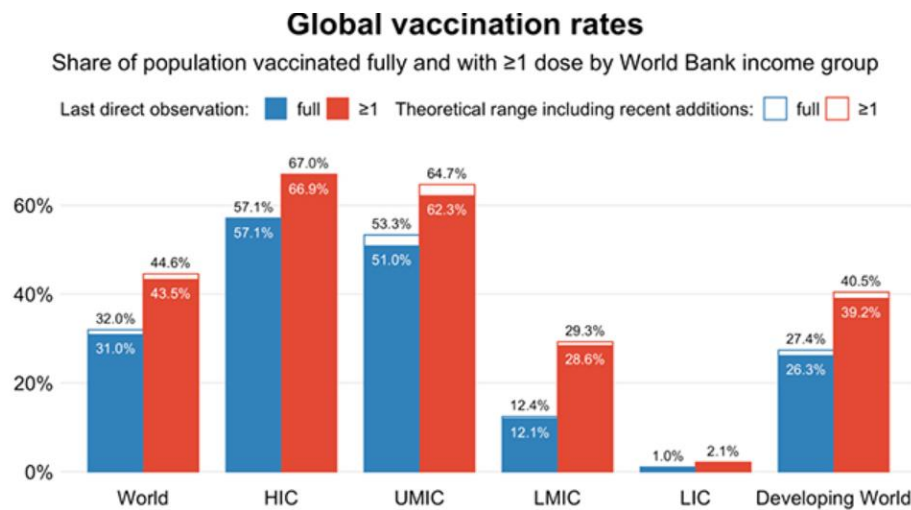
equity, safeguarding human rights, fostering social progress, preserving the natural environment, and advancing public healthcare and safety. The aforementioned factors hold significant relevance not only in the context of achieving sustainable development objectives, but also in terms of their profound implications for the promotion of peace and prosperity. The United Nations' Sustainable Development Goals (SDGs) incorporate this consideration, with particular emphasis on SDG-16, which pertains to the establishment of peaceful, just, and robust institutions. In contemporary times, the practise of peacebuilding has expanded to encompass health interventions and the dissemination of scientific knowledge. The promotion and sustenance of peaceful conditions is a paramount element in the attainment of universal health, as enunciated in a seminal resolution ratified by the World Health Assembly (WHA) in 1981.

Within the Asia-Pacific region, there are 12 countries which are being classified as the least developed countries on a global scale. There are ten countries that are categorised as either landlocked developing countries or small island developing states. Five of these countries are classified as landlocked developing countries, while the remaining five are classified as small island developing states. The consistent economic expansion of these nations has played a significant role in diminishing income-based destitution and has expedited their advancement towards fulfilling various objectives of the Millennium Development Goals (ESCAP, 2021). The region known as the Indo-Pacific is inhabited by a majority of the global population, approximately 65%. This region also contributes to a significant portion of the world's gross domestic product (GDP), amounting to 63%. Furthermore, over 60% of the world's maritime trade is facilitated through this area (Dev, 2022, April 7).

It appears that the region has continued to experience a high level of severity in terms of COVID-19 cases and fatalities. The COVID-19 outbreak has resulted in 689,399,752 confirmed cases and 6,883,596 deaths and 661,821,638 are recovered cases as of 28 May, 2023. The user reports that the Indo-Pacific region has seen a significant number of confirmed COVID-19 cases, with a total of 149.7 million cases as of July 2022. Sadly, this has resulted in the loss of 1.1 million lives. According to Worldometer's Coronavirus report in 2023, it appears that India has the highest number of confirmed cases (44.5 million) and deaths (528,150) compared to other countries in the region.

The criticality of vaccine equity in the Indo-Pacific region has also been sustained. The report indicates that vaccination rates in Asia and the Pacific showed an observable increase during the period under consideration. Nonetheless, it is worth noting that there was a significant disparity in these rates across the region. It is worth noting that the vaccination rates in Afghanistan, Solomon Island, and Papua New Guinea (PNG) are among the lowest in the region. In particular, PNG has a population where less than 3% of individuals have received all of their vaccinations. The low vaccine uptake can be attributed to various factors, such as vaccine refusal, vaccine hesitancy, and illiteracy. The poverty alleviation efforts in the Asia Pacific region faced a setback due to the impact of COVID-19. It appears that in many countries, the pandemic may have had a negative impact on food security, basic health services, and education. It is evident that the pandemic has had a disproportionate impact on individuals who are economically disadvantaged and vulnerable. The recovery of economies is taking place, albeit in an uneven manner. It is worth considering that the Asia Pacific countries in development face the possibility of stagflation, food insecurity, and energy price shocks due to

the Ukraine conflict's disruption of the global supply chain. Additionally, internal civil unrest may further hinder economic recovery prospects.



Source: <https://pandem-ic.com/>

From the above discussion, it is highlighted that the significant effects on health, peace, security, and development caused by vaccine inequities. It suggests that global health diplomacy is crucial in addressing this issue. The framework involves collaboration among global actors from public, civil, and private sectors at different levels. The main objectives are to promote health and prevent epidemics and emergencies through diplomatic engagements. The restoration of peace should be recognised and facilitated by medical professionals who are serving individuals impacted by war and conflict.

Quad's Vaccine Partnership

The unprecedented threat of the COVID-19 pandemic has impacted humanity in many ways which were never seen before. The topic of public health is currently being discussed by various multilateral and regional organisations, including the World Trade Organisation, the World Health Organisation, EU, AU, SCO, Quad and others organizations. During this period of global calamity, a significant challenge arises from the inability of COVID-19 vaccines, medications, and other medical supplies to be transported across different regions of the world. The Indo-Pacific region is facing a significant challenge in terms of vaccine inequality due to the COVID-19 pandemic. It appears that the Quad is making a renewed commitment to combat the pandemic and improve healthcare and security structures in the area. According to Mehra (2022, June 7), the Quad's recent actions to provide vaccines to developing and low-income countries in the Indo-Pacific indicate their dedication to promoting peace and development in the region, while also striving for a "Free, Open, Secure, and Prosperous" environment.

The launch of the Vaccine Partnership and the Vaccine Experts Group took place during the inaugural virtual Quad Leaders' Summit in March 2021. It was mentioned that the Quad had taken steps to establish additional working groups and projects aimed at improving cooperation in the areas of health, climate, and technology within the Indo-Pacific region. The

COVID-19 vaccine initiatives were centred on broadening the manufacturing, financing, and logistics aspects. The scope of this encompasses vaccine production, procurement, as well as the delivery of vaccines to the last end user and needy. The initiatives focused on enhancing the efficiency of international organisations and furthering the advancement of health security architecture in the Indo-Pacific region. According to reports, the Quad partners have announced their intention to collaborate with established multilateral mechanisms such as COVAX and WHO in order to facilitate the distribution of vaccines to nations located in the Indo-Pacific area. It is worth noting that the COVAX initiative received a significant contribution of about \$5.2 billion, which accounts for approximately 40% of the total government donations received by the global vaccine fund, from the Quad partners. According to Smith's report (May 27, 2022), the Quad countries distributed over 670 million vaccine doses, with at least 265 million of those doses going to countries in the Indo-Pacific region.

The Indo-Pacific region's COVID-19 situation is being addressed by committing to supply 1 billion doses by the end of 2022. This can be achieved by creating a \$3.3 billion fund for manufacture purposes. It appears that the Indo-Pacific region has received a total of \$219 million in grant aid, with \$212 million of that amount being allocated specifically for the emergency Support Loan programme. It is stated that the Quad Vaccine Experts Group has plans to offer \$100 million in regional healthcare as emergency aid. It appears that the QUAD is proposing to offer top-notch digital connectivity, healthcare, and health security infrastructures through the Infrastructure Coordination Group, with a focus on transparency. Technical assistance, capacity building, and other forms of support would be extended to the Indo-Pacific regional partners.

The Quad members have come together to address the logistical and financial aspects of vaccine production in response to the gravity of the situation created by COVID-19. According to Mueller and Robbins (2021), the QUAD has established reliable supply chains for vaccines that were developed in the US, funded by Japan and the US, manufactured in India, and supported by Australia. The aim was to leverage the unique capabilities of each of the four nations in order to obtain and distribute vaccines that are both safe and effective throughout the region. The India manufacturing sector's expansion will receive financial support from agencies such as the Japan International Cooperation Agency (JICA) and the United States Defence Finance Corporation (DFC), according to the announcement. DFC has announced its collaboration with India's Biological E to finance the production of a minimum of 1 billion vaccine doses by the end of 2022. The fact sheet of the Quad Summit on March 12, 2021, states that JICA has proposed to provide concessional Japanese loans to the Government of India for the purpose of expanding more vaccine manufacturing facilities.

It seems that India is being viewed as the most promising option for the QUAD to narrow the gap with China in terms of vaccine distribution. It appears that New Delhi has taken measures to boost its production, administered vaccines to a significant number of its citizens, and intends to commence exporting doses by October. It appears that New Delhi was influenced by significant pressure from the United States to take this action. The announcement was made prior to the scheduled visit of Prime Minister Narendra Modi to the United States (Guha, 2021 September 28th). It is worth noting that the Quad has pledged to provide one

billion vaccine doses to nations in the Indo-Pacific region by the conclusion of 2022. It is noted that Johnson & Johnson and Novavax from the United States are planning to establish their presence in India. It has been reported that Johnson & Johnson has entered into a contract with Biological E Limited, a company based in Hyderabad, to produce its vaccine in India (Guha, 2021 Sep 28).

The inception of the 'Climate Working Group' occurred during the aforementioned meeting. Increased multilateral collaboration between the Quad and other regional countries was mandated to enhance the effectiveness of the Paris Agreement's implementation. The Quad is dedicated to supporting the advancement of technologies that generate reduced emissions. The Group has been directed to provide assistance on matters related to climate, such as climate finance, adaptation, resilience, climate technology, and climate capacity building. The inaugural virtual summit of the recently significant Quad alliance took place on March 12, 2021. A statement of principles concerning the design, development, and application of technology is being drafted by the third 'Critical and Emerging Technology Working Group'. The aim is to bring together a diverse group of stakeholders to work together on coordinating national technology standards and collaborating with the private sector on the rollout of telecommunications infrastructure among regional countries. The group will monitor new trends and potential opportunities in the industry while also arranging discussions about critical technology supply chains.

Furthermore, it was declared that the Quad allies would collaborate to enhance the distribution of vaccines in remote areas, commonly referred to as 'last-mile' vaccinations, in addition to producing and providing vaccine-related materials. The administration and communication of Covid-19 vaccinations encompass a broader operation, with the vaccination process being the final stage. Establishing credibility and trust with the general public, ensuring convenience, maintaining appropriate vaccine storage facilities and cold chains, and ultimately, providing accessible vaccination sites are all crucial components in the successful administration of vaccines. The Australian government has committed \$77 million towards this objective, with a specific focus on Southeast Asia. The allocated funds will be utilised for the acquisition and transportation of vaccines. Furthermore, Australia has committed a sum of US\$ 407 million to facilitate regional vaccine accessibility and enhance health security. This initiative aims to achieve comprehensive immunisation coverage across nine Pacific island nations and Timor-Leste. As per the Fact Sheet released on March 12, 2021, Japan has announced its intention to extend a grant aid of US\$ 41 million to developing nations to assist them in procuring vaccines and providing cold-chain support.

The Quad has launched programmes like the "Quad Fellowship for STEM" education to boost progress in the Indo-Pacific area. This is the government's latest effort to foster better regional cooperation in the years to come. The first in-person Quadrilateral Security Dialogue meeting took place on September 24, 2021. The United States President, Joe Biden, made the QUAD fellowship programme official at this gathering. As a result of this programme, students from the Indo-Pacific region will have access to graduate-level STEM programmes at U.S. universities. The head of state has announced that one hundred students from 25 member countries, including but not limited to the United States, Australia, Japan, and India, will

receive scholarships as part of this programme. It is expected that the aforementioned students will attend some of the best universities in the United States to earn doctorates in STEM fields. The program's overarching goal is to create opportunities for creative minds in the United States, Japan, India, and Australia to work together and make connections with one another. The primary goal is to connect the next generation of scientists and technologists and help them develop a shared foundation of knowledge. Accenture, Blackstone, Boeing, Google, Mastercard, and Western Digital are just some of the major corporations that have shown their support for this effort. The administration put out a call for new fellowship donors on October 17 (Leverage Edu. 2022).

According to some strategic commentators and thinkers, the Quad has previously prioritised building consensus over emphasising its security objectives. At the Tokyo Summit held in May 2020, there was a change in the stance that was previously taken. During the summit, the Quad conveyed a distinct message to China regarding their approach to maritime strategy. The IPMDA Initiative was launched as a joint effort to improve maritime security and shared domain awareness in the Indo-Pacific region through the use of technology and training support. The main goal of this effort is to help regional countries enhance their capacity to protect their waters from any potential actions by China. To truly grasp IPMDA, it's crucial to have a comprehensive comprehension of the positions and intentions of all strategic actors in the designated area of interest. In order to identify actors who exhibit unusual or threatening behaviour, it's important to compile, correlate, and merge surveillance data from a variety of sources, including satellites, radar, reconnaissance planes, and human intelligence. Multilateral cooperation has given priority to a collaborative approach for information sharing and domain awareness due to the vastness of the ocean and the significant funding required for comprehensive maritime surveillance by the QUAD. Our goal is to establish a mutual comprehension of the happenings and dangers in the ocean among nations with similar views in the Indo-Pacific region. According to Pandalai and Singh (2022, June 24), the QUAD's IPMDA could be enhanced by establishing regional fusion centres that are operated and supported by its members. These centres would include India's IOR IFC, Australia's Pacific Fusion Centre in the South Pacific, Japan's MDA Situational Indication Linkages (MSIL), and the US Navy's Sea Vision platform.

The message to China is not explicitly stated under the IPMDA, but it is implied by the QUAD. Our objective is to assist regional partners in efficiently deploying their maritime assets for various purposes such as responding to natural disasters, providing humanitarian aid, and combating illegal fishing. The Chinese fishing fleets have been engaging in exploitative practises while fishing in the Indo-Pacific region. This has led to frequent conflicts and a great deal of public outrage. According to Pandalai and Singh (2022, June 24), the IPMDA initiative would not only assist in the identification of Chinese actions but also in countering China's grey-zone activities.

Health Diplomacy vs Health Diplomacy: Geopolitical Concerns

In the wake of the COVID-19 pandemic's worldwide impacts, prioritising public health has become an urgent concern for all nations. The distribution of vaccines has become an important factor in international relations. Providing vaccines to less advantaged countries is seen as a way to improve relationships, cooperation, and goodwill, while also expanding geostrategic and geopolitical influence. It seems that a race has started among major powers and vaccine-producing countries to provide vaccines to countries that do not have access to them. Even though the Quad and China have conflicting views on geostrategic and geopolitical matters, they have both engaged in vaccine partnerships as a positive step towards public health, despite their differing political agendas. The emergence of geopolitical and geostrategic tensions among certain countries has been observed, with the QUAD and China being a notable example.

The Chinese government has initiated a health diplomacy approach aimed at facilitating vaccine accessibility to nations in the Indo-Pacific region. In early March 2021, media outlets reported that Quad members were considering vaccine diplomacy as a strategy to counter China. Discussions have reportedly taken place among Quad member nations regarding the potential of their vaccine funding to reduce the developing world's dependence on China. Similarly, at the individual level, member countries of QUAD have been endeavouring to counter China in this regard.

During the pinnacle of the COVID-19 pandemic, the United States responded politically by attempting to downplay China's efforts in health diplomacy while simultaneously emphasising their own actions. Despite the Biden administration's efforts to limit China's global exposure, their attempts have been ineffective in curbing China's growing strategic influence on a global scale. In an effort to limit China's impact in the Indo-Pacific area, the QUAD, led by President Biden, initiated a vaccine partnership to provide vaccines to nations in the region, according to Guha (2021 Sep 28).

China has responded politically to the vaccine proposal put forth by the Quad, reciprocating the same in kind. The Quad's expression of support for vaccines has been met with criticism from China, which has also reciprocated by engaging in divisive rhetoric with Quad members. According to a set of articles released by the state-owned Global Times, India (Yonghong, 2021, March 18), Japan (Guangtao, 2021, April 6), and Australia (Editor Notes, 2021, March 29) have been cautioned against excessively trusting and depending on the United States. Furthermore, according to CCP media, there is a warning that if the trio of nations persists in collaborating with the US, they may face the risk of being denied entry to China's market. In an effort to deepen the divide between Tokyo and Washington, D.C., comparable pieces have been released in Japanese publications. The utilisation of threats by China to influence Quad members is expected to amplify anti-China sentiments in the four nations, rather than causing them to retreat. This could potentially intensify the resolve to employ vaccines as a means of countering China.

The Quad Vaccine Partnership was established not only for humanitarian reasons, but also as a response to China's vaccine diplomacy. China has sold 1.9 billion doses to 118 countries worldwide, including almost all Indo-Pacific nations, and donated an additional 246 million doses. The Tokyo Quad Summit featured a \$100 billion investment to support the Quad Vaccine Partnership's ongoing endeavours, however, the Quad has not met its targets and has fallen short of expectations one year after its establishment. Furthermore, the effectiveness of the Quad's contributions is lower to that of Beijing, with the initial provision of 325,000 doses in April accounting for less than 1% of Beijing's distribution or gifting of over 40 million doses in Cambodia. Following the announcement of the partnership, India experienced a severe surge in COVID-19 infections, which led to New Delhi increasing its focus on domestic vaccine production in India while reducing its contributions towards vaccine donations. The commencement of the partnership was delayed by a few months due to that setback.

The Quad's vaccine selection led to additional complexities. The rationale behind the Quad's selection of Johnson & Johnson and Corbevax vaccines over Pfizer or Moderna vaccines remains unclear. The Quad has designated a single facility in Hyderabad, India, owned by the Indian company Biological E, to produce the chosen vaccines. Nevertheless, this alternative faced immediate challenges. The administration of the Johnson & Johnson vaccine has been prohibited by the U.S. Food and Drug Administration (FDA) due to the potential risk of blood clots. Furthermore, India refused to engage in a liability pact that would have granted Johnson & Johnson immunity against any legal actions stemming from the vaccine's negative consequences. Biological E has discontinued the production of the Johnson & Johnson vaccine due to the aforementioned incidents and is presently focused on the exclusive manufacturing of the Corbevax vaccine. Due to the vaccine's experimental status and lack of approval from the WHO, it does not meet the criteria for overseas donation. The initial contribution of doses from the Quad was limited due to the restricted production capacity of the sole Hyderabad facility. The progress of the Quad Vaccine Partnership was delayed due to setbacks encountered. As a result, China and specific Quad constituents, including the US, assumed the initiative in contributing charitable contributions (Nagar and Sergio, 1 July 2022).

The geopolitical implications and concerns resulting from the procrastination and hesitation exhibited by QUAD are critical for regional cooperation point of view. The Quad's inefficiency in executing its global project has raised apprehensions regarding the alliance's capability to effectively manage diplomatic and economic endeavours. The concerns regarding credibility serve to reinforce the views of Quad critics, who perceive the alliance as being primarily focused on military matters and lacking the ability to effectively address significant economic, political, and humanitarian issues in the Indo-Pacific region as Mahbubani (January 27, 2021).

According to Pal (2021), the aforementioned perception presents a significant opening for Beijing, enabling it to establish its dominance as the only competent actor capable of effectively engaging in economic and diplomatic affairs in the Indo-Pacific region. Southeast Asian nations are inclined to refrain from provoking China and restrict their association with the Quad, thereby diminishing the alliance's implicit objectives of establishing a comprehensive regional coalition to counter China.

Conclusions

Geopolitics and public health drive the Quad's Vaccine Partnership. It improves ties, cooperation, and regional influence among the member countries. The Quad's vaccination programmes are reactions to China's Vaccine Diplomacy in the Indo-Pacific. The Quad's vaccination distribution efforts have fallen behind China. Furthermore, the Quad's health diplomacy has become complicated by vaccine selections and productions. The Quad's Vaccine Partnership continues to confront the COVID-19 epidemic and promote Indo-Pacific healthcare and security despite these hurdles. The Quad promotes regional collaboration and development through vaccine distribution and programmes in climate, technology, and education. The Climate Working Group promotes emission-reducing technology and Paris Agreement implementation. The Quad Fellowship for STEM education provides scholarships for graduate-level STEM programmes in the US for students from member nations, encouraging collaboration and knowledge-sharing. The Quad's Vaccine Partnership shows its member nations' commitment to peace, development, and a "Free, Open, Secure, and Prosperous" Indo-Pacific via improved healthcare and collaboration.

The Quad's Vaccine Partnership has fructified in fostering public health cooperation. With identification of geopolitical obstacles, the Quad needs to strengthen cooperation among the stakeholder and major adversary to promote peace, prosperity, and a free and prosperous Indo-Pacific. The QUAD needs to focus on investing in R&D, manufacturing, and knowledge transfer.

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