

SHAPING SECURITY BEYOND ARMS: THE QUAD AND HUMAN FUTURES IN THE INDO-PACIFIC

Parfej Ali ^{1*}, Salil Biswas ²

^{1,2,3}Gauhati University, Assam, India

*Corresponding author: parfejali2000@gmail.com

Abstract

In contemporary world politics non-traditional security is a major concern, which is unlike preceding centuries. Numerous non-state actors such as terrorist networks, drug cartels, civil wars, and maritime piracy networks known as new age threats. Apart from such non-traditional non-state and transnational security threats environmental degradation is a gravest threat to the future existence of the modern sovereign entities. Whereas non-traditional security is closely related to human security i.e. human security is a core component or lens through which (non-traditional security) NTS is understood and addressed. In 2004 Quad were established to coordinate humanitarian assistance and disaster relief in Indian Ocean Tsunami. The Quad's regional strategy has evolved from a purely strategic-security framework to one that prioritizes human-centric concerns. By addressing health, climate resilience, disaster relief, and digital empowerment, the Quad is aligning its policies with the principles of human security, thus broadening its influence as a multilateral platform committed to inclusive, sustainable development in the Indo-Pacific. Therefore, this study is being conducted through qualitative research method, and the research design are descriptive and analytical based on secondary data, this paper aims to explore the intricate linkages between non-traditional security challenges and the evolving role of the Quad in shaping a human-centric strategy for the Indo-Pacific region.

Keywords: Human Security, Quad, Indo-Pacific, Non-Traditional Security, Regional Cooperation, Climate Governance.

INTRODUCTION

Security is a dynamic concept, adapting to changing global realities. Which refers to the state of being free from danger, threat, or harm. It encompasses measures, conditions, and policies designed to protect individuals, communities, nations, or systems from risks that could compromise their safety, stability, or functioning. The concept of security is broad and can be classified into various types based on the context, however, broadly there are two types of security traditional security and non-traditional security. While traditional security is about military invasion of a state to another one. Conversely, the notion of non-traditional security is contemporary and noteworthy; the emergence of non-state actors, drug cartels, intra-state conflict (e.g. civil wars) and, environmental degradation became new age threats (SRIKANTH, NON-TRADITIONAL SECURITY THREATS IN THE 21ST CENTURY: A REVIEW, 2014). The ultimate aims of security are the protection and enhancement of human lives. In illustration,

according to the 1994 UNDP report, fifty years ago, Albert Einstein culminated the discovery of atomic energy with characteristic simplicity: “Everything changed”. “He went on to predict: we shall require a substantially new manner of thinking if mankind is to survive” (UNDP, 1994). Even though nuclear explosion in Hiroshima and Nagasaki devastated and horrified humankind. Thus, the concept of security is border than it is interpret and represent narrowly: such as countries external aggression and national interest in foreign policy or global security from the threat of nuclear holocaust, which are majorly confined in nation-states than people (UNDP, 1994). After, WW2 superpowers were fighting for establishing their ideological dominance across the world. Also, newly independent developing and underdeveloped countries were struggling to ensure their national security, within fragile national identities. Therefore, irrespective of developed, developing, and underdeveloped countries each and every nation-state were forgotten to ensure individuals, who sought security for their daily lives, such as to protect human life, dignity, and well-being, regardless of the specific concept or context of security. According to (Newman, 2010) in broad terms human security is 'freedom from want' and 'freedom from fear': positive and negative freedoms and rights as they relate to fundamental individual needs. The Quad was established in 2004 in the wake of the Indian Ocean Tsunami to provide humanitarian assistance, however, each country emphasis on human security as a top priority in its foreign policy, since 2017, the Quad leaders have referred to leaders' declarations on human security and their dedication to this goal less frequently. Nonetheless, the human security strategy is important, particularly for ties with nearby Pacific regions (Takahashi, 2024). This study will examine; How is the Quad addressing NTS? Is there a human-centric shift? undertaken by the Quad to address key non-traditional security challenges in the Indo-Pacific, including health security, climate change, disaster resilience, and emerging technologies. It will review existing literature on the evolving concept of human security and analyze how the Quad's strategic priorities have shifted toward people-centered approaches. Through secondary sources and illustrative case studies, the study seeks to highlight effective interventions and cooperative frameworks that reflect a human-centric vision. Ultimately, this research contributes to the growing discourse on non-traditional security by underscoring the importance of integrated, inclusive, and multilateral approaches in shaping a secure and resilient Indo-Pacific region.

THEORITICAL FRAMEWORK

In order to examine the changing role of the Quad in tackling non-traditional security concerns in the Indo-Pacific, this study is principally guided by the ideas of Human Security Theory and Regional Security Complex Theory (RSCT). Human Security Theory moves security studies' emphasis from the conventional military-dominated, state-centric paradigm to the defense of people and communities. It highlights fundamental components that are essential to comprehending security in the modern world, including livelihood, dignity, health, and the environment. By adopting this viewpoint, the study acknowledges that problems like as pandemics, climate change, maritime piracy, and humanitarian crises pose existential risks to human survival and well-being in addition to states, necessitating collaborative, people-centered solutions.

At the same time, Regional Security Complex Theory (Buzan & Waever, 2003) provides a structural lens to situate these human-centric concerns within the broader security dynamics of the Indo-Pacific. RSCT suggests that security is regionally clustered, shaped by patterns of interdependence and shared vulnerabilities, making cooperative frameworks like the Quad both necessary and effective. Together, these theories help explain the Quad's transition from a narrowly strategic-security initiative into a platform that incorporates disaster relief, health diplomacy, climate resilience, and digital empowerment. By integrating human security into regional security dynamics, the Quad not only addresses immediate non-traditional threats but also positions itself as a key multilateral actor promoting inclusive and sustainable development in the Indo-Pacific.

THE EVOLUTION OF THE QUAD

The Quad is a group of four Indo-Pacific democracies- India, US, Australia, and Japan, which was established in the wake of the 2004 Indian Ocean Tsunami to coordinate humanitarian assistance and disaster relief (Wei, 2024). According to the vice president of Observer Research Foundation Harsh V. Pant stated that "by the end of humanitarian relief mission in mid-January 2005 a new seeding of the Quad framework emerged in the leaders' minds" (Wei, 2024). In 2007, Japanese Prime Minister Shinzo Abe formalized the Quad to enhance maritime security and strengthen cooperation among four democracies in response to China's growing influence. In may 2007 the four countries held their first Quad meeting with joint naval exercise in Bay of Bengal. Due to different interest and considerations among the countries and China's suspicion over the aims and functions over the new group Quad fell apart. During the presidency of Donald J. Trump, the Quad was revived. In 2012, when Abe became

Prime Minister for the second time, he published an opinion piece titled, “Asia’s Democratic Security Diamond” on the Project Syndicate website (Wei, 2024). In 2016, before Trump’s presidency, Shinzo Abe introduced Japan’s “Free and Open Indo-Pacific” strategy, emphasizing security, political, and economic cooperation. In his Nairobi speech, he called for a region rooted in freedom, rule of law, and prosperity, free from coercion—highlighting maritime security as a central pillar. Furthermore, in New York foreign ministers of the Quad met for the first time to discuss cooperation on counterterrorism, humanitarian assistance and disaster relief, maritime security cooperation, development, and cybersecurity. In 2022 Quad leader summit in Tokyo, Quad launched new initiatives Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA). The IPMDA enhances Indo-Pacific partners’ ability to quickly detect and respond to illicit maritime activities, climate events, and humanitarian crises through advanced maritime domain awareness (Cabinet, Indo-Pacific Partnership for Maritime Domain Awareness, 2023). Thereby, human security is the pivotal theme of the Quad group; The Quad has increasingly shifted from a purely strategic security grouping to a more human-centric regional partnership by addressing key non-traditional security challenges in the Indo-Pacific. In the realm of health security, the Quad Vaccine Partnership launched in 2021 led to the delivery of nearly 800 million COVID-19 vaccine doses globally, later evolving into the broader Quad Health Security Partnership focusing on pandemic preparedness, health workforce training, and disease surveillance (DFAT, 2023). In climate change cooperation, the Quad Climate Working Group and Q-CHAMP promote clean energy, climate resilience, and environmental disaster response across the region (Mizo, The Emerging Quad 3.0: Prioritizing a Hard Security Agenda, 2025). On emerging technologies, the Quad’s Critical and Emerging Technology Working Group advances cooperation on AI, 5G, semiconductors, and tech governance aligned with democratic values (Quad, 2021). Cybersecurity efforts include joint principles on secure software and a Quad action plan for undersea cable protection to bolster digital resilience (Press Information Bureau, 2024). In addition, the Quad Infrastructure Coordination Group supports sustainable infrastructure development in areas such as digital connectivity, health systems, and energy, complemented by training programs like the Infrastructure Fellowships initiative (U.S. Embassy & Consulates in India, 2024). Collectively, these efforts reflect the Quad’s transition toward a comprehensive Indo-Pacific strategy that centers on human security, inclusivity, and resilience.

NON-TRADITIONAL SECURITY CHALLENGES IN THE INDO-PACIFIC

In recent years, the Indo-Pacific region has emerged as a critical arena not only for traditional geopolitical rivalries but also for a complex array of non-traditional security challenges that transcend conventional military concerns. These challenges—ranging from climate change and pandemics to cyber threats and transnational crime—pose significant risks to the stability, development, and security of the diverse nations within this strategically vital region. Include key areas of human security relevance:

Health Security: whereas at the 2023 Quad leaders decided to evolve a comprehensive health security partnership. Which promoting coordination and collaboration among Quad countries strengthens regional and global health security by building on joint efforts in COVID-19 vaccine delivery and supporting economic recovery in the Indo-Pacific (Cabinet, 2023). The Quad is spearheading major initiatives to assist partners in tackling pandemics, combating diseases, and responding to natural disasters. Thus, ‘the Quad is leading ambitious projects to help partners address pandemics and disease; respond to natural disasters’ (Pib, 2024). The four Quad countries launched Cancer Moonshot initiatives in 2024 to reduce the burden of cancer in Indo-Pacific (Ministry of External Affairs, 2024). The Quad Cancer Moonshot is a landmark collaborative initiative by the Quad countries—India, Japan, Australia, and the United States—aimed at strengthening cancer care in the Indo-Pacific region. It seeks to enhance health infrastructure, expand research partnerships, and promote early detection, prevention, and treatment of cervical cancer, particularly in underserved areas.

Despite being preventable and treatable, cervical cancer remains a leading cause of death among women in the Indo-Pacific, with low HPV vaccination and screening rates. The Quad initiative addresses these gaps through vaccine deployment, improved screening access, medical training, and research collaboration. Each member country contributes uniquely: the U.S. supports funding, training, and global research; India offers screening tools and digital health expertise; Australia scales vaccination programs via the EPICC consortium; and Japan provides medical equipment and technical assistance.

This multilateral effort also involves partnerships with international organizations and NGOs, such as the WHO, World Bank, and philanthropic networks like WHEN and the Minderoo Foundation. Collectively, these stakeholders are working to reduce disparities in cancer care and advance equitable access to lifesaving services. Ultimately, the Quad Cancer Moonshot reflects a broader human security vision—framing health as a regional security priority—and reinforces the Quad’s shift toward a human-centric Indo-Pacific strategy. The Quad remains

committed to enhancing health security and resilience across the Indo-Pacific, including continued support for the Pandemic Fund. In 2024, the Quad Health Security Partnership strengthened regional preparedness through a second pandemic simulation exercise and ongoing efforts to develop standard procedures for future health emergencies. Collaborative initiatives also included specialist training to improve regional response capabilities.

India will host a workshop and release a white paper on emergency public health strategies. Australia is expanding its deployable public health workforce, beginning with training in Darwin. Meanwhile, the United States has pledged over \$84.5 million to support 14 Indo-Pacific countries in strengthening disease prevention, detection, and response capacities. Moreover, in response to both clade I and clade II mpox outbreaks, the Quad aims to coordinate efforts to ensure equitable access to safe and effective vaccines, including supporting vaccine production in low- and middle-income countries where appropriate.

Climate Change & Environmental Threats Quadrilateral Security Dialogue is known as Quad which is fostering a free and open Indo-Pacific region. The group engaging all types of non-traditional security concerns in the region. Climate change is the top most anticipated issues on the agenda of the Quad. The reasons why, Quad is the home to a quarter of the world's population and 35 percent of the world's GDP. Therefore, "the Quad can prove to be a torch-bearer for the global climate agenda" (Roy, 2021), because the region is engulfed with various climate change impacts. To bolster climate security "the Quad set up a Working Group on Climate Change and launched practical joint climate action, namely "The Quad Climate Change Adaptation and Mitigation Package' (Q-CHAMP)," (Verma & S, 2024). Which simultaneously focus on climate mitigation and resilience, and emphasize on climatic diplomatic efforts with other and other regional organization, alike ASEAN to address climate change vulnerabilities effectively. Thus, The Quad supports the Coalition for Disaster Resilient Infrastructure (CDRI) to strengthen climate resilience and infrastructure across the Indo-Pacific (Ramnath, 2022). In order to provide technical assistance to small island developing governments, the Quad countries will organize a Climate & Information Services Task Force and construct a new technical center through the Coalition for Disaster Resilient Infrastructure (India, 2024). Furthermore, The Quad aims to enhance Early Warning Systems and Climate Information Services (CIS) in the Pacific, boosting climate resilience. The U.S. will provide 3D-printed weather stations and expert training in Fiji. Australia supports the region via the Early Warning Systems through Weather Ready Pacific, a Pacific-led initiative supported by the Pacific Islands Forum Leaders in 2021 that drives and delivers on the EWS4ALL UN initiative in the Pacific

(Press Information Bureau, 2024). Japan contributes through its “Pacific Climate Resilience Initiative”, focusing on disaster preparedness and renewable energy. Experts in several Pacific nations will be trained to improve flash flood forecasting and response. With these milestones there are significant issues among the Quad countries; while Japan and USA capable to achieve net-zero emission by mid-21st century, conversely, ‘India and Australia have not chosen concrete net-zero emission targets yet’ (Roy, 2021). However, ‘by advocating on climate change and other non-traditional security issues, members of the quad want to demonstrate their capacity for productive collaboration and real benefits’ (Centre for Social and Economic Progress, 2023).

Disaster Relief and Humanitarian Aid earlier in twenty years ago four countries came together in response to the devastating 2004 Indian Ocean earthquake and Tsunami, and surged humanitarian assistance to affected countries (Press Information Bureau, 2024). Afterward ‘in 2022 Quad countries signed into HADR (Humanitarian Assistance Disaster Relief) in response to the deadly landslide in Papua New Guinea in May 2024, the Quad countries jointly provided over \$5 million in humanitarian aid and continue to support the country’s long-term resilience efforts. Response efforts will follow the UN principles of humanity, neutrality, and impartiality, as outlined in Resolution 46/182. The Quad is strengthening its coordination on disaster relief across the Indo-Pacific by pre-positioning essential supplies to enable rapid response to natural disasters in regions including the Indian Ocean, Southeast Asia, and the Pacific. In the coming months, Quad disaster relief experts will also carry out a tabletop exercise to enhance preparedness for future emergencies. Additionally, the Quad is providing over \$4 million in humanitarian assistance to help Vietnam recover from the devastating impact of Typhoon Yagi’ (Press Information Bureau, 2024). Quad partners require a formal request for international assistance before acting jointly under the Partnership framework. They may provide coordinated or individual support during all phases of disaster response—preparedness, emergency response, and recovery—while fully respecting the sovereignty and territorial integrity of the affected country. The Partnership is committed to inclusive humanitarian action, promoting gender equality, empowering women and girls, involving persons with disabilities, and ensuring that indigenous peoples, minorities, and vulnerable groups are not left behind. There is a strict zero-tolerance policy for inaction on Sexual Exploitation, Abuse, and Harassment (SEAH). Quad partners will meet twice a year to exchange operational updates and lessons learned and will conduct at least one scenario-based tabletop exercise annually to strengthen coordination and preparedness. The Partnership will also

collaborate with the UN, international donors, regional and local governments, NGOs, and other relevant actors to ensure effective and principled humanitarian assistance (Ministry of External Affairs, Government of India, 2022). On April 3, 2025 the Quad countries said in joint statement that the Quad partners have collectively committed over \$20 million in humanitarian aid so far. According to their statement, they are providing relief supplies, deploying emergency medical teams, and supporting humanitarian organizations delivering care to those impacted by the recent earthquake in Myanmar. The Quad also expressed support for recent agreements on temporary and partial ceasefires, urging all parties to uphold, extend, and expand these efforts to ensure safe and timely delivery of critical aid across the country. Additionally, the Quad welcomed the ASEAN Foreign Ministers' statements from March 29 and 30, and acknowledged the vital support provided by ASEAN and regional countries to affected communities (The Hindu, 2025).

Energy Security the Quad countries have committed to deepening cooperation on clean energy by aligning policies, investments, and standards to build high-quality, diversified supply chains that enhance energy security and create economic opportunities, especially across the Indo-Pacific. In September 2024 Wilmington Declaration became a milestone the four countries agreed to strengthen cooperation on clean energy supply chains as part of their broader efforts to boost energy security and build economic resilience (Schwartz & Subramanlan, 2025). Joint efforts will focus on strengthening key areas such as mineral production, recycling, and battery manufacturing, leveraging the complementary strengths of each partner. As part of this, Australia will launch the AUD 50 million Quad Clean Energy Supply Chains Diversification Program in November to support solar, hydrogen, and battery projects. India has pledged \$2 million for new solar initiatives in Fiji, Comoros, Madagascar, and Seychelles. Japan will provide \$122 million in grants and loans for renewable energy projects across the region. The U.S., through the DFC, is supporting solar manufacturing in India with \$750 million in loans to Tata Power Solar and First Solar, and is actively pursuing further private capital investment in solar, wind, cooling, batteries, and critical minerals. Additionally, the Quad is launching a new initiative to promote affordable, high-efficiency cooling systems to help climate-vulnerable communities cope with rising temperatures. The U.S. will provide an initial \$1.25 million in technical assistance funding for this effort (Pib, 2024).

Cybersecurity & Technology Cybersecurity the Quad is working together to create a stronger, more secure, and resilient cyber ecosystem for its members and partners. The four democracies are facing a sharp rise in cyber threats and malicious activities, including DDoS

attacks, ransomware, supply chain breaches, zero-day exploits, and cyber espionage. These growing risks, driven by geopolitical tensions and increasing divisions in cyberspace, threaten the security and stability of both the Quad nations and the wider Indo-Pacific region (Patil et al., 2025). Thus, on 24th September 2021 Quad Senior Cyber Group (QSCG) was created by the Quad leaders' President Biden hosted Prime Minister Scott Morrison of Australia, Prime Minister Narendra Modi of India, and Prime Minister Yoshihide Suga of Japan (The White House, 2021), Summit held at white house (Australian Department of Home Affairs, n.d.). A new Quad Action Plan to Protect Commercial Undersea Telecommunications Cables reflects shared goals for global digital connectivity and economic security. In support of secure digital infrastructure, Quad countries are also partnering with software firms and industry leaders to implement and align secure software development standards, as outlined in the 2023 Secure Software Joint Principles. These efforts aim to improve the security of government networks and boost cyber resilience across digital supply chains.

This fall, all four nations will host the annual Quad Cyber Challenge to promote responsible cyber practices and raise awareness. This year's focus includes building career pathways in cybersecurity, particularly for women and underrepresented groups. Last year's campaign saw over 85,000 participants across the Indo-Pacific. Key initiatives such as the Quad Cyber Bootcamp and a regional conference in the Philippines highlight the Quad's commitment to cyber capacity building. Joint efforts also include enhancing the protection of critical infrastructure, sharing threat intelligence, and coordinating responses to major cybersecurity incidents (Pib, 2024). This discussion highlights two recent Quad cybersecurity initiatives, beginning with the 2023 "Joint Principles for Secure Software." These principles are designed to minimize software vulnerabilities that could be exploited in cyberattacks. As part of this effort, the Quad is developing guidelines for governments to follow throughout the software lifecycle—from development to procurement and use—ensuring continuous monitoring and improved security from the outset (Fabiani, 2024). Owing to that Quad partners are committed to ensure rigorous and consistent processes will be implemented to guarantee that software products operate securely and as designed, with active collaboration with the software industry to encourage these standards. By embedding secure practices throughout the entire software lifecycle, the aim is to greatly minimize both the number and impact of software vulnerabilities (MoEA, GoI, 2023).

India's Role in Promoting Human Security within the Quad Through its emphasis on issues like disaster assistance, climate change, and pandemic preparedness, India contributes

significantly to the Quad's efforts to advance human security, especially in the Indo-Pacific area. India's focus on these challenges within the Quad framework supports the region's overarching objective of greater security and resilience while also being in line with its own national priorities.

India plays an active role in the Quad's efforts to strengthen pandemic preparedness through initiatives like the Quad Vaccine Partnership, developing standard response procedures, hosting workshops, and publishing guidance on emergency public health (Pib, 2024). In addressing climate change and disaster relief, India contributes to enhancing regional resilience, particularly through space-based monitoring of extreme weather events (Wilson Center, Environmental Change and Security Program, 2021). India also leads in counter-terrorism cooperation, having hosted the first working group in 2023 focused on threats from drones, chemical, biological, radiological, nuclear weapons, and online terrorism (Pib, 2024). In space situational awareness, Quad partners share expertise to promote the sustainable use of space, which supports climate monitoring. India's maritime security initiatives, such as SAGAR and the Indo-Pacific Oceans Initiative, align closely with the Quad's regional priorities (Pant, 2022). The Quad framework upholds human rights and dignity, consistent with Sustainable Development Goals and inclusive principles (MoE, GoI, 2024). Strategically, India remains cautious about the Quad becoming a formal military alliance, preferring to focus on non-traditional security areas while balancing its relationships with Russia, the SCO, and others (Upadhyay, 2022). India is also mindful of its border tensions with China and aims to ensure the Quad is not perceived as an anti-China bloc. Overall, India's engagement with the Quad reflects a multifaceted approach, addressing shared challenges while carefully managing its broader strategic interests (Oros & Gordan, 2021). Thus, India is working as a voice for the Global South in human security dialogues.

Challenges & Critique

While the Quad has broadened its agenda beyond traditional military topics—e.g. through its vaccine partnership, climate-change working groups, and disaster-relief initiatives—it remains heavily anchored in strategic and security discourse. For example, the Quad Vaccine Partnership aims to strengthen health infrastructure in the Indo-Pacific, but critics argue that coordination mechanisms to ensure equitable access and long-term resilience remain underdeveloped (Stromesh, 2021). Similarly, its disaster-relief work (HA/DR) is often ad hoc and not institutionalized, limiting sustained human-security impact (Halдар, 2024).

Though the Quad officially frames itself as focused on “a free and open Indo-Pacific,” numerous analysts argue that the initiative remains implicitly oriented toward balancing China’s influence. Critics label it an “Asian NATO” or a soft-security bloc: it touts public goods, but most of its cohesion stems from military and naval coordination, plus strategic signaling (Kwek, 2021). The absence of formal alliance structures further compounds ambiguity: while it executes joint exercises and crisis diplomacy, it does not commit to collective defense, in contrast to AUKUS or even the Squad, keeping military-driven orientation without full alignment (Koga, 2023).

Limited institutionalization compared to other regional platforms (e.g., EU, ASEAN). Unlike the EU or ASEAN, the Quad has no secretariat, permanent bureaucracy, or binding protocols. It operates primarily through occasional leaders’ summits and ministerial dialogues, which limits continuity and long-term planning. Scholars note its institutional framework remains “thin,” even though some see movement toward deeper structure. Comparisons with ASEAN highlight concerns that the Quad’s ad-hoc nature prevents effective implementation and reduces legitimacy among smaller regional states (ISEAS, 2023).

Geopolitical competition with China—does it overshadow human security goals? The Quad’s rise has been widely interpreted as a strategic response to China’s assertiveness in the South and East China Seas. Although Quad statements usually avoid naming China explicitly, their emphases on coercive behavior and rules-based norms carry clear reference (Lee, 2023). Chinese sources criticize the Quad as a U.S. instrument of containment, suggesting geopolitical competition is its core logic. As strategic rivalry escalates, there is concern that human-security initiatives may be overshadowed or deprioritized in favor of hard security coordination.

Power asymmetry among Quad members Power disparities—especially in economic resources, military strength, and strategic footprint—pose challenges for internal cohesion and agenda-setting. The United States is the dominant power in the Quad, while India, Japan, and Australia vary in capacity and strategic priorities. India, for instance, remains wary of formal military alliances due to its strategic autonomy tradition. Australia, Japan, and the U.S. rely on alliance structures and shared threat perceptions. This asymmetry complicates the group’s ability to move beyond coordination to collective human-security action.

In sum, while the Quad has expanded into human-security domains such as health, climate, and disaster relief, these efforts remain overshadowed by strategic and military imperatives. The lack of robust institutional infrastructure, combined with power imbalances and Sino-U.S. geopolitical competition, limits the Quad’s capacity to deliver sustained,

inclusive human-security outcomes (Kumar & Khan, 2021).

Conclusion

Indo-Pacific region has reached an important crossroads and normal security interest is inadequate to cope with the complicated threatening situations that its people are experiencing at the moment. The prominence of non-traditional security (NTS) challenges such as pandemics, environmental catastrophes, cyber-attacks and humanitarian emergency, means that the urgency of elevation of the human security consideration must not be lost as an afterthought in any regional policies. In this new orbit, the Quadrilateral Security Dialogue (Quad) comprising India, US, Japan and Australia has been reinventing itself over the years to get anchored not entirely in the military-strategic, but the human-centric also. It is a movement that reflects the broader realization that we need to address vulnerabilities for the people and communities to whom these transnational threats do so much damage, if we are to create enduring peace and stability in the Indo Pacific. The Quad comes historically as a result of the formation in 2004 after the Indian Ocean tsunami when the four countries initiated the work in relation to humanitarian assistance and disaster relief (HA/DR). Since then, it has significantly consolidated its mandate to other non-traditional security challenges that include health security, climate change, cybersecurity as well as energy resilience. The creation of such programs as the Quad Vaccine Partnership, climate working groups, and digital capacity-building in the regions can be seen as a deliberate effort to keep up with the vision of human security. Such trends can be viewed as the development of a new way of thinking about security which becomes more inclusive and people-centered. Nevertheless, in spite of all these laudable attempts, there are still remarkable issues that still work against the effectiveness of the Quad to become a genuinely human-based multilateral system. Among the main criticisms, one of them is that the Quad is a strategically centered group where most of its unity is presumed to be based on a form of implicit balancing with China in its region. Even as Quad members highlight mantras like a free open indo-pacific, critics remind that such statements may just be a cover of deep-rooted military strategic-orientation. Consequently, efforts at enhancing human security are at times seen as minor when compared to other circumstances of intense geopolitical rivalry. Furthermore, the lack of a formal institutional framework precludes the Quad from being successful in achieving durable human security results. Unlike regional mechanisms with greater institutionalization such as the EU or ASEAN, the Quad does not have a permanent secretariat, binding treaties, or even mechanisms for detailed, long-term

implementation of policy. Much of this poor, “thin institutionalization” makes its operations strongly dependent upon the political will of member states and thus too often leads to piecemeal and ad hoc action that does not scale. The result is that while the Quad has had significant achievements in responding to pandemics and disaster relief, these remain predominantly episodic and inadequate for constructing enduring resilience across the Indo-Pacific.

This uncertainty is deepened by internal imbalances between the Member States. The United States enjoys a preponderance of military and economic strength, and 12 It is the United States of America whose peoples so populate this hemisphere, and it is the United States that sits at the apex of the homeland's national security establishment.

Data availability statement

This study relies entirely on secondary data obtained from publicly accessible and verified sources. All data used in this study were obtained from publicly available sources, and no original data were generated as part of this research. Further details and references can be provided upon request. The study complies with the utmost guidelines for moral research. There are no animal subjects, human participants, or sensitive personal data being collected that would require official institutional review board ethical approval. All of the data and information used in this study came from reliable, verifiable, and publically accessible sources. There were no direct interactions with human or animal participants, surveys, or tests carried out. Additionally, no ethical concerns or conflicts arose during the research process. This assures the study's integrity, openness, and adherence to accepted ethical standards.

Competing Interests

The author affirms that there are no financial, personal, or professional competing interests that could have influenced the research, analysis, or writing of this article.

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References

- Centre for Social and Economic Progress. (2023). *Leveraging the Quad for India's climate ambitions*. Retrieved from Centre for Social and Economic Progress: <https://csep.org/wp-content/uploads/2023/10/5-1.pdf>
- E3G. (2021). *The Quad on climate*. Retrieved from E3G: <https://www.e3g.org/news/the-quad-on-climate/>
- Ministry of External Affairs, Government of India. (2022, May 24). *Guidelines for Quad Partnership on Humanitarian Assistance and Disaster Relief (HADR) in the Indo-Pacific*. Retrieved from Ministry of External Affairs: https://www.mea.gov.in/bilateral-documents.htm?dtl/35745/Guidelines_for_Quad_Partnership_on_Humanitarian_Assistance_and_Disaster_Relief_HADR_in_the_IndoPacific
- Australian Department of Home Affairs. (n.d.). *Quad Senior Cyber Group*. Retrieved from Department of Home Affairs, Government of Australia: <https://www.homeaffairs.gov.au/about-us/our-portfolios/cyber-security/quad-senior-cyber-group>
- Cabinet, A. G. (2023). *Health Security | Quad Leaders' Summit 2023 | PM&C*. Retrieved from Australian Government Department of the Prime Minister and Cabinet: <https://www.pmc.gov.au/resources/quad-leaders-summit-2023/health-security>
- Cabinet, A. G. (2023). *Indo-Pacific Partnership for Maritime Domain Awareness*. Retrieved from Australian Government Department of the Prime Minister and Cabinet: <https://www.pmc.gov.au/resources/quad-leaders-summit-2023/indo-pacific-partnership-maritime-domain-awareness>
- Craig, S. L. (2007). NONTRADITIONAL SECURITY THREATS. *Strategic Studies Institute, US Army War College*.
- Department of the Prime Minister and Cabinet. (2023). *Quad Leaders' Summit 2023: Climate*. Retrieved from Australian Government: <https://www.pmc.gov.au/resources/quad-leaders-summit-2023/climate>
- DFAT. (2023, May 20). *Quad Vaccine Partnership*. Retrieved from Indo-Pacific Centre for Health Security: https://indopacifichealthsecurity.dfat.gov.au/covid-19-vaccine-access/quad-vaccine-partnership?utm_source=chatgpt.com
- Fabiani, D. (2024, December 11). *Cyber Security through the QUAD*. Retrieved from Sasakawa Peace Foundation: https://www.spf.org/iina/en/articles/diletta_01.html
- Haldar, S. (2024, October 04). *Does the Quad have a security agenda?* Retrieved from Observer Research Foundation: https://www.orfonline.org/expert-speak/does-the-quad-have-a-security-agenda?utm_source=chatgpt.com
- India, U. E. (2024, May 20). *Fact sheet: Quad Leaders' Summit*. Retrieved from U.S. Department of State: https://in.usembassy.gov/fact-sheet-quad-leaders-summit/?utm_source=chatgpt.com
- International Energy Agency. (2022). *Quad Statement of Principles on Clean Energy Supply Chains in the Indo-Pacific*. Retrieved from International Energy Agency: <https://www.iea.org/policies/18073-quad-statement-of-principles-on-clean-energy-supply-chains-in-the-indo-pacific>

- ISEAS. (2023). *2023/63 "The Quad: Less than the Sum of its Parts?" by Nick Bisley*. Retrieved from ISEAS YUSOF ISHAK INSTITUTE: https://www.iseas.edu.sg/articles-commentaries/iseas-perspective/2023-63-the-quad-less-than-the-sum-of-its-parts-by-nick-bisley/?utm_source=chatgpt.com
- Koga, K. (2023). *Institutional Dilemma: Quad and ASEAN in the Indo-Pacific*. Retrieved from Asian Perspective: https://muse.jhu.edu/article/881958?utm_source=chatgpt.com
- Kumar, R., & Khan, A. (2021, May 08). *The Quadrilateral Security Dialogue's Path to Institutionalization: A He and Feng Perspective*. Retrieved from Air University: <https://www.airuniversity.af.edu/JIPA/Display/Article/3768292/the-quadrilateral-security-dialogues-path-to-institutionalization-a-he-and-feng/>
- Kwek, I. (2021, April 14). *The Quad's uneasy place in Southeast Asia*. Retrieved from The Interpreter: https://www.lowyinstitute.org/the-interpreter/debate/quad?utm_source=chatgpt.com
- Lee, M. (2023, March). *Quad FMs, wary of China's might, push Indo-Pacific options*. Retrieved from AP news: <https://apnews.com/article/indo-pacific-diplomacy-india-us-australia-japan-china-17ebf36a78b413a1946f6bfec5546074>
- Ministry of External Affairs, G. o. (2024). *Fact Sheet: Quad Countries Launch Cancer Moonshot Initiative to Reduce the Burden of Cancer in the Indo-Pacific*. Retrieved from Ministry of External Affairs, Government of India: <https://www.mea.gov.in/bilateral-documents.htm?dtl/38326/>
- Ministry of Foreign Affairs of Japa. (2023). *Quad Joint Leaders' Statement 2023*. Retrieved from <https://www.mofa.go.jp/mofaj/files/100509241.pdf>
- Ministry of Foreign Affairs of Japan. (2022, May 24). *Quad Joint Leaders' Statement*. Retrieved from Ministry of Foreign Affairs of Japan: <https://www.mofa.go.jp/files/100347798.pdf>
- Ministry of Foreign Affairs of Japan. (n.d.). *Quad Cybersecurity Partnership: Joint Principles*. Retrieved from Ministry of Foreign Affairs of Japan: <https://www.mofa.go.jp/files/100347801.pdf>
- Mizo, R. (2024). *The Quad, maritime security, and climate change*. Retrieved from Toda Peace Institute: <https://toda.org/global-outlook/2024/the-quad-maritime-security-and-climate-change.html>
- Mizo, R. (2025, July 12). *The Emerging Quad 3.0: Prioritizing a Hard Security Agenda*. Retrieved from Toda Peace Institute – Global Outlook: <https://toda.org/global-outlook/2025/the-emerging-quad-3.0-prioritizing-a-hard-security-agenda.html>
- MoE, GoI. (2024, July 29). *Quad Foreign Ministers' Meeting Joint Statement*. Retrieved from Ministry of External Affairs: <https://www.mea.gov.in/bilateral-documents.htm?dtl/38044/Quad+Foreign+Ministers+Meeting+Joint+Statement#:~:text=They%20are%20integrated%20and%20indivisible,Foreign%20Ministers'%20meeting%20in%202025.>
- MoEA, GoI. (2023, May 20). *Quad Cybersecurity Partnership: Joint Principles for Secure Software*. Retrieved from Ministry of External Affairs, Government of India: <https://www.mea.gov.in/bilateral->

documents.htm?dtl/36574/Quad_Cybersecurity_Partnership_Joint_Principles_for_Secure_Software

- Newman, E. (2010). Critical human security studies. *Cambridge University Press*, 36, 77-94. <https://doi.org/10.1017/S0260210509990519>
- Oros, A. L., & Gordan, A. (2021, December 07). *The Quad Should Help India Address Its Most Pressing Security Challenge: Climate Change*. Retrieved from New Security Beat: <https://www.newsecuritybeat.org/author/aoros/>
- Pant, H. V. (2022, March 20). *India and the Quad: Chinese belligerence and Indian resilience*. Retrieved from Observer Research Foundation: <https://www.orfonline.org/research/india-and-the-quad#:~:text=There%20has%20been%20a%20significant,defence%20policy%20and%20maritime%20security>.
- Patil, S., Sarma, A., & Chandola, B. (2025, March 17). *Strengthening the Quad's Regulatory Diplomacy on Cybersecurity*. Retrieved from ORF (Observer Research Foundation): <https://www.orfonline.org/research/strengthening-the-quad-s-regulatory-diplomacy-on-cybersecurity>
- Pib. (2024, September 22). *Fact Sheet: 2024 Quad Leaders' Summit*. Retrieved from Press Information Bureau: <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2057460>
- Press Information Bureau. (2024, May 20). *Quad Leaders' Summit 2024: Joint efforts toward a resilient Indo-Pacific*. Retrieved from Government of India: <https://pib.gov.in/PressReleasePage.aspx?PRID=2057460>
- Press Information Bureau. (2024, May 20). *Quad Leaders' Summit 2024: Strengthening cooperation in the Indo-Pacific*. Retrieved from Government of India: https://www.pib.gov.in/PressReleasePage.aspx?PRID=2057460&utm_source=chatgpt.com
- Quad. (2021, March 12). *Critical and Emerging Technologies Working Group*. Retrieved from Quad Partnership Portal – Utsav: <https://quadpartnership.utsav.yoga/critical-and-emerging-technologies>
- Ramnath, A. (2022). Climate Resilience and the Quad. *Institute of Peace and Conflict Studies*. Retrieved from https://www.ipcs.org/comm_select.php?articleNo=5821
- Roy, A. (2021, September 24). Climate Action and the Quad. Observer Research Foundation. Retrieved from <https://www.orfonline.org/expert-speak/climate-action-and-the-quad>
- Schwartz, L. W., & Subramanlan, N. (2025, July 28). *Quad and energy security in the Indo-Pacific*. Retrieved from Foreign Policy: https://foreignpolicy.com/2025/07/28/quad-energy-security-indo-pacific/#cookie_message_anchor
- SRIKANTH, D. (2014). NON-TRADITIONAL SECURITY THREATS IN THE 21ST CENTURY: A REVIEW. *International Journal of Development and Conflict*, 4, 60-68.
- SRIKANTH, D. (2014). NON-TRADITIONAL SECURITY THREATS IN THE 21ST CENTURY: A REVIEW. *International Journal of Development and Conflict*, 60-68.

- Stromesh, J. (2021, September 23). *ASEAN and the Quad: Strategic impasse or avenue for cooperation?* Retrieved from Brookings: https://www.brookings.edu/articles/asean-and-the-quad-strategic-impasse-or-avenue-for-cooperation/?utm_source=chatgpt.com
- Takahashi, M. (2024). The Role of the Quad in the context of human security: Can the Quad become a good neighbor of the Blue Pacific? *Journal of Human Security Studies*, 13, 1-20.
- The Hindu. (2025, April 04). *Quad grouping coordinating efforts for relief to Myanmar after earthquake.* Retrieved from The Hindu: https://www.thehindu.com/news/international/quad-grouping-coordinating-efforts-for-relief-to-myanmar-after-earthquake/article69411665.ece#goog_rewarded
- The White House. (2021, September 24). *Fact Sheet: Quad Leaders' Summit.* Retrieved from Biden White House Archives: <https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2021/09/24/fact-sheet-quad-leaders-summit/>
- U.S. Embassy & Consulates in India. (2024, May 20). *Fact sheet: Quad Leaders' Summit.* Retrieved from U.S. Department of State: <https://in.usembassy.gov/fact-sheet-quad-leaders-summit/>
- UNDP. (1994). *HUMAN DEVELOPMENT REPORT 1994.* Oxford University Press. Retrieved from <https://hdr.undp.org/system/files/documents/hdr1994encompletenostats.pdf>
- Upadhyay, S. (2022, July 12). *BRICS, Quad, and India's Multi-Alignment Strategy.* Retrieved from STIMSON: <https://www.stimson.org/2022/brics-quad-and-indias-multi-alignment-strategy/#:~:text=India%20did%20not%20support%20the,mutual%20cooperation%20on%20global%20issues.>
- Verma, S. S., & S, A. V. (2024). Understanding the Quad's Climate Diplomacy in the Indo-Pacific Region. *Millennial Asia*. <https://doi.org/https://doi.org/10.1177/09763996241258344>
- Wei, Z. (2024). The Evolution of the 'QUAD'. *Horizons: Journal of International Relations and Sustainable Development*(25).
- Wilson Center, Environmental Change and Security Program. (2021). *The Quad Should Help India Address Its Most Pressing Security Challenge: Climate Change.* Retrieved from New Security Beat: <https://www.newsecuritybeat.org/2021/12/quad-india-address-pressing-security-challenge-climate-change/#:~:text=A%202021%20survey%20of%20Indian,the%20effects%20of%20climate%20change.>