

About BTTN

Balochistan Think Tank Network (BTTN) was established at Quetta, on March 1, 2021. It is an autonomous, non-profit, non-partisan, and multidisciplinary Research Center with a focus not limited to Balochistan only but includes the regional and global dynamics which can influence Pakistan. Broadly, BTTN endeavors to undertake in-depth research of provincial issues with a view to developing the socio, political, and economic status of the province. Its interests also include issues of Energy, Regional Stability, Strategic Stability, Peace and Security, Arms Control and Disarmament, Non-Proliferation, Peaceful Uses of Nuclear Technology, Conflict Resolution, Regional Connectivity, and Socioeconomic development at the national level. Geopolitically, besides South Asia, BTTN's research areas also include regions of Europe and Africa.

BTTN OP-EDs

Balochistan Think Tank Network (BTTN) Faculty of Research has been writing op-eds on a regular basis on different contemporary issues that are published on various international and national platforms. The opinions expressed in this edition are the authors' individual views and do not reflect the official policy of BTTN or any governmental organization. This electronic review is compiled monthly.

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Editor's Note

October has been a month of particularly eventful happenings in the context of South Asian security and strategic events. This concern provides a complete contemplation of the arising geopolitical changes, deterrence posture changes, and defense reorientation that keeps redefining the regional balance of power. The set of articles featured here explores the murkiness of diplomacy, the modernization of defense, and strategic signaling--all articles are good as they provide a fine understanding of the multivariied nature of modern regional politics.

Our first article discusses the politics of sports diplomacy, that is, how cricket, which has traditionally been viewed as a unifying force in South Asia, has become more and more a political hostage, subject to political discourses and maneuvers. The discussion can be seen as an extension of diplomatic isolation beyond the realms of official dialogue and the way it is reflected in cultural and sports fields, where attitudes and perceptions between the neighboring states are developed.

The following articles extend to the strategic and defense arenas where new alliances and emerging doctrines are transforming old equations of security. The mutual defense agreements debate highlights the opportunities and threats of a strategic partnership as states cope with a quickly changing international order characterized by competition, polarization, and realignments.

Similarly, the case analysis of the Indian mobility and modernization projects on its missiles including the rail-mobile Agni-Prime presents a critical reflection in real-time on the technological development and its effects on deterrence stability in the region. These analyses, combined with the discussion of the Indian naval buildup, highlight the growing competition in the maritime and ground-based strategic space. Combined, they point to a territory that is being continually rewired and tested, creating pressing concerns regarding escalation management and strategic restraint.

The article also comprises insightful views on the changing defense relations, especially with Saudi Arabia. The works comment on the larger strategic payoffs such partnerships could return to both bilateral relationships and the regional security architecture in general. Such strengthening of relations can perhaps become the stabilizing element in a turbulent strategic climate--assuming the canny diplomacy and long-range planning.

The final group of entries shifts the critical focus on the rising rhetorical militarism of India, its policy of hegemony through escalation, and on its long-standing hegemony in the region. Overall, the authors claim that this kind of posturing, however aggressive it might seem on the surface, can destabilize the region and reveal the inconsistency in the Indian grand strategy. They support a new emphasis on stability, dialogue, and responsible statecraft to ensure that the region does not descend into strategic miscalculation.

All in all, this is the competition of deterrence and diplomacy, ambitions and restraint, cooperation and competition that this issue of our publication encapsulates. South Asia has found itself at a junction on the road to strategic change, and there is an urgent need to explore these changes with critical acumen and the weight of a balanced judgment by academics, leaders, and practitioners alike. The analyses gathered here are intended to make something of value to that debate--not mere commentary, but thoughtful understanding and an invitation to practical action in an area that can hardly afford further confrontation.

Editor

Dr. Siraj Bashir Baloch

Fragility of Global Nuclear Order

Sher Ali Kakar

AFTER its tariff turmoil and trade war, President Donald Trump has turned to nuclear testing, which he considers an important step to the security and geopolitical interests of the United States in a multipolar world in which the US status is declining rapidly.

As geopolitical tension rises between the US, Russia, and China, and the US prioritizes nuclear modernization, the global hope for arms control and disarmament is fading away. These nuclear rivals appear to be indulging themselves into an unending new arms race with strategic implications impinging upon them and their allies.

President Trump's decision to resume nuclear testing after a gap of more than three decades has sparked great concerns about the prospects of arms control and disarmament frameworks, as pledged in

the nuclear nonproliferation treaty, which are already fragile. The move has come amidst the failure of Trump's efforts to bring Russia and China to the negotiating table for multilateral nuclear arms control negotiations. As the US-Russia talks on extending the new START dwindle, and China continues to show unwillingness to join multilateral negotiations alongside the US and Russia, Washington is finding a new way of securing its interests of strategic dominance and geopolitical goals. Russia and the US have adopted different approaches to negotiating the critical matters, thus resulting in their lack of cooperation and reaching an agreement. Russia sees any negotiation with the US as meaningless without taking into account the general geopolitical and military-strategic context. Also, the US deployment of ground-launched intermediate and shorter-range missiles in Europe and the

Asia-Pacific region intensifies Moscow's threat perception.

The prospects for US-Russia cooperation are already undermined by the ongoing Russia-Ukraine War and Moscow's growing perceived threats to its sovereignty from the US and its European allies. From China's perspective, the nuclear forces of China and the US are not the same, besides differences in the security environment and nuclear policies. Thereby, joining the multilateral negotiations may not suit China's vital security interests. For this reason, China has labeled the US-proposed multilateral negotiations "unreasonable and unrealistic".

The US perceives nuclear modernization of both Russia and China as a direct threat to its strategic dominance. According to an estimation by the Bulletin of the Atomic Scientists, as of now, Russia possesses a stockpile of about 4,300 nuclear warheads. These are assigned for use by long-range strategic launchers and non-strategic

weapons (NSNW). Russia's low threshold for nuclear use is perceived by the US as a direct challenge to its deterrence credibility, which the US may counter with a more dominant regional and global response. In the same way, the US is also fearful of China's expanding nuclear capacity. According to a report by the Pentagon, China now has nearly 600 nuclear weapons and may reach 1000 by 2030 and continue onwards. The development of road-mobile missiles, ballistic missile submarines (SLBMs), and hypersonic glide vehicles is perceived by the US as a signal of ambition to assert military dominance, especially in the perceived Indo-Pacific region. Russia is already in line with the US on nuclear testing after it revoked the CTBT ratification status in 2023. Russia has already announced "reciprocal measures" if the US tests. China has called on the US to uphold the moratorium on nuclear testing to maintain global strategic balance and stability.

To defy international pressure and criticism due to the weakening of the global nuclear frameworks, Donald Trump also claimed that a few countries, including North Korea and Pakistan, have been carrying out nuclear tests. As far as Pakistan is concerned, it has been following a unilateral moratorium on nuclear testing since 1998, though it is not bound by any non-proliferation treaty. The resumption of nuclear testing could start a chain reaction at the global and regional levels. In South Asia, India has already shown its intentions for nuclear tests. After Trump's claim, India was very quick to unfoundedly blame Pakistan for nuclear proliferation and nuclear testing, something India has done time and again. Intentionally, this is to put psychological pressure on global nuclear powers while paving the way and means for resuming nuclear testing. Unlike India, Pakistan's nuclear forces are India-specific. Pakistan was not the first to resume and will not be the first to resume

nuclear testing. It is India that tested first its nuclear weapons, and because of an acute security rivalry between the two South Asian rivals, Pakistan had no option but to go nuclear.

Trump's decision to resume nuclear testing indicates that major powers continue to prioritize their interests for dominance while undermining efforts for the collective interests of the international community. Also, it highlights the fragility of global frameworks that are established only to serve the interests of a few and create security dilemmas for others. The resumption of nuclear tests could recall the first nuclear age, which saw a quick chain reaction by major powers.

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India's Military Modernization and Strategic Landscape of South Asia

Safia Gul Kakar

The strategic landscape of South Asia is mainly defined by the balance of power equation between the two nuclear-armed neighbours, India and Pakistan. The strategic thinking of the Indian leadership and its offensive policies have become a constant driver of the evolving security dynamics of South Asia. India's growing military capabilities, alongside its doctrinal shifts, are endangering the regional security environment. In recent years, India has undertaken a massive military modernization program in conventional and nuclear domains. India's military modernization efforts are driven by strategic ambitions in the region and beyond. India's steady economic growth has enabled the country to import advanced military technologies and to boost indigenization. India is currently the world's second-largest arms importer, despite its

massive investment in indigenization. India's strategic partnership with the United States, France, and Israel has enabled the country to acquire advanced military technologies, as evidenced by its long-range missile systems, sea-based capabilities, and the import of advanced fighter jets. India's acquisition of sophisticated military and dual-use technologies is leading to strategic imbalances in the region, compelling Pakistan to take countermeasures to strengthen the strategic balance in line with its policy.

Currently, India has the world's second-largest military and the fifth-largest defense budget. In the world. According to the Global Firepower Index 2025, India ranks fourth among the world's most powerful militaries. The Indian Air Force (IAF) is enhancing its offensive and

defensive capabilities. India is upgrading its military for a qualitative and quantitative advantage in South Asia. India is receiving support from the US and Israel to strengthen its space-based capabilities. Similarly, India continues to modernize its naval capabilities, including the submarine-launched ballistic missiles (SLBMs) such as K-4 and K-5. India is further procuring advanced unmanned aerial vehicles (UAVs), the use of Artificial Intelligence (AI), and Jamming capabilities for offensive use.

These developments show a major shift in India's military posture from deterring China and Pakistan to building capabilities with global reach. In recent years, India has significantly expanded its missile program, focusing heavily on long-range systems. These developments complicate South Asia's security landscape, undermine existing international nuclear norms, and could

even challenge the strategic interests of the US and its allies worldwide. India is developing more advanced long-range missiles, such as the Agni-V and the Agni-VI. The Agni-V can reach 5,000 to 7,500 kilometers, while the Agni-VI is expected to extend up to 10,000 kilometers. Additionally, the Agni-VI is reported to be capable of carrying multiple independently targetable re-entry vehicles (MIRVs). Recently, India reportedly tested its most advanced hypersonic cruise missile, which is reportedly designed for deployment from land, sea, and air platforms. The missile is dual-capable, carrying conventional or nuclear payloads.

These advanced systems show that India is aiming for greater global influence and military reach. With ICBMs, MIRV technology, SLBMs, and Anti-satellite (ASAT) weapons, India is moving beyond regional defense towards capabilities that give it a much wider strategic

presence. Alongside its military modernization in conventional and nuclear domains, India's aggressive and Hindutva-driven policies towards the region, especially Pakistan, are posing serious threats to regional peace and stability. Hindu nationalism, since Modi came to power, has dominated the Indian political landscape while also influencing its military posturing. BJP is believed to be the political wing of RSS, which is an Indian right-wing, Hindu nationalist, and paramilitary volunteer organization. The Indian government policies are largely driven by the Hindutva ideology, which is the belief in the hegemony of Hinduism in India and the establishment of the country as a Hindu.

After the revocation of Article 370 of its constitution, the then Army Chief and India's defense minister issued provocative statements about Kashmir. While continuing this negative trend by the Indian leadership, India's defense

minister Ranjanth Singh recently issued a statement saying: "Today, the land of Sindh may not be a part of India, but civilisationally, Sindh will always be a part of India. And as far as land is concerned, borders can change. Who knows, tomorrow Sindh may return to India again." These provocative statements by the Indian political and military leadership reflect India's strategic ambitions, which are threatening regional peace and security.

To conclude, India's aggressive policies and military posture in South Asia pose an immediate and pervasive threat to the peace and security of the region and beyond. Pakistan should continue to reinforce its policy of full-spectrum deterrence within the ambit of credible minimum deterrence. Resolving the long-standing Kashmir dispute is essential for lasting peace, stability, and security in South Asia. The international community should not ignore India's expanding

ambitions in the Region. To reduce mistrust, both countries need to take concrete bilateral steps. One important measure is restoring diplomatic missions as part of Confidence Building Measures (CBMs), which would also help resume trade and improve communication. Along with this, true progress in Kashmir cannot be achieved without respecting the people of Kashmir's right to self-determination and implementing the relevant United Nations resolutions. Furthermore, India should work with Pakistan to enhance diplomatic engagement at international forums, and both sides should also strengthen and institutionalize existing CBMs, many of which have weakened due to repeated violations by the Indian side.

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India's Launch of a New Navy-Based Surveillance Satellite

Gulzar

Indian Space Research Organization (ISRO) has launched the Indian Navy's GSAT-7R (also known as CMS-03) communication satellite on 02 Nov 2025 from the Satish Dhawan Space Centre in Sriharikota, which is considered one of the most advanced and heaviest space-based communication satellites for strengthening communication and maritime domain awareness capabilities of the Indian Navy in the Indian Ocean and Arabian Sea.

The launch also sends a clear strategic signal to Pakistan and other actors in the region due to India's past aggressive intentions against Pakistan and China. The 4400 kg satellite with a lifespan of 15 years is the replacement of GSAT-7 Rukmini, which was launched in 2013. The satellite aims to link Indian warships, submarines, and aircraft under a secure network to operate across multiple frequency bands

and enable the transmission of voice, video, and data up to 2,000 km from India's coastline.

This satellite launch isn't an isolated case but part of a broader strategy that reflects ISRO's militarization and the development of a space culture in parallel with the navy's expansion. According to The Times of India, ISRO plans seven space missions by March 2026 and the launch of 52 defense surveillance satellites by 2029 under the Space-Based Surveillance (SBS-3) program. India's Military Space Doctrine, developed by the Defense Space Agency, is a clear image of Space Weaponization, regional hegemony, and expanding global ambitions.

The Agni-5 forms a cornerstone of India's nuclear deterrence and places it among a select group of nations with such long-

range capabilities, which provokes concern and apprehension not only for South Asian countries but also globally. For decades, India has marked Pakistan and China as its major rivals and threats to defense and security.

Both nations are close enough to fall within India's military reach, yet these circumstances also highlight India's aspirations for regional and global hegemony through lunar missions, the human spaceflight program (Gaganyaan), and advanced heavy-lift capabilities. India also aims to strengthen its space economy and establish itself as a preeminent global leader in space technology through INR Rs. 1,000 crore Venture Capital (VC) Fund operated under the auspices of IN-SPACE (Indian National Space Promotion and Authorization Center).

For Pakistan, the launch of GSAT-7R represents far more than a technical upgrade, as the Pakistan Navy is

responsible for safeguarding over 1,000 kilometers of coastline and an Exclusive Economic Zone (EEZ) of nearly 290,000 square kilometers, which also plays a pivotal role in ensuring the country's maritime security and trade routes.

Besides gradual modernization, the Navy still faces capability constraints compared to its regional rival, the Indian Navy, which operates a far larger fleet and advanced surveillance assets. The GSAT-7R effectively extends India's eyes into the Arabian Sea to monitor operations and movements of Pakistan through real-time intelligence and secure data links, and share with its Indian warships and submarines.

This also undermines Pakistan's operational secrecy and limits its freedom to exercise maneuvers during both peace and crises. This also adds psychological and strategic pressure on Pakistan's naval decision-making. This not only expands but

also increases India's maritime command and control network, and affects Pakistan's ability to execute and plan rapid-response missions, making the strategic balance in the Arabian Sea more delicate.

India can indirectly influence Pakistan's key maritime trade routes, especially for imports and exports through Karachi and Gwadar. To preserve operational secrecy and naval deterrence, Pakistan must enhance its Maritime Domain Awareness (MDA) capabilities by integrating coastal radars, UAVs, and sub-surface sensors.

To strengthen its naval logistics and surveillance networks in the Arabian Sea, Pakistan aims to deepen its strategic partnership with China through projects like the China-Pakistan Economic Corridor (CPEC) and the development of Gwadar Port. GSAT-7R has created an information gap, and to fill it, Pakistan should upgrade its existing technology, like coastal radars,

drones, and remote-sensing satellites, into a unified maritime monitoring system.

The launch of GSAT-7R by the Indian Navy has marked a significant change in maritime intelligence, which provides New Delhi with near-real-time, all-weather situational awareness across the Arabian Sea. While this launch is a notable achievement for the Indian Navy, it also raises security concerns for other countries in South Asia.

This prolonged surveillance or communication satellite has reduced operational secrecy, especially regarding Pakistan's submarine and fleet movements, and has imposed new limitations on naval planning in both routine and crisis circumstances. It also intensifies concerns about monitoring of activities around Karachi and Gwadar, which are Pakistan's main trade hubs.

Pakistan can mitigate these challenges by strengthening its naval cooperation with China, mainly in space-based surveillance, multi-source intelligence fusion, and quantum-resistant secure communications, which are critical for safeguarding Pakistan's maritime security

in the evolving strategic environment and restoring operational balance in the region.

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[satellite/](https://stratheia.com/indias-launch-of-a-new-navy-based-surveillance-satellite/) *Gulzar (Intern Balochistan think Tank Network)*

Trump's Nuclear Gamble: Igniting a New Arms Race

Nomeen Kassi

The recent statement by the U.S. president Donald Trump places global peace in a critical position. In a post, Donald Trump has announced that he has instructed the Department of War to resume nuclear weapons testing. This statement comes after Russian President, Vladimir Putin, broadcasted that Russia has been testing nuclear-powered torpedo and a new cruise missile. Trump gave the reason that since other countries are testing nuclear, therefore U.S. would follow the trend immediately.

His statement has been criticized by many experts. They believe Trump is even unaware of who tests nuclear weapons. Matthew Bunn, a nuclear weapons expert at Harvard University states that "Trump seems to think it's the Department of Defence/War that carries out nuclear tests. In contrary, it's the Department of Energy." Moreover, the Centre for Arms Control and Non-Proliferation describes nuclear tests as "generally controlled explosions of nuclear devise, such as bombs or warheads." in

this context they believe that Russia's missile and torpedo tests do not meet that strict definition. Therefore, it is safe to say that other states which Trump refers to (China and Russia), are not testing nuclear weapons for decades; last time Russia in 1990, and China in 1996.

Hans Kristensen, director of the Nuclear Information Project at the Federation of American Scientists, criticized the announcement, as he predicted that "if the U.S. started testing a nuclear weapon, it would almost certainly open the gates for other nuclear weapon states to follow", hence, leading to nuclear arms race and global uncertainty. To illustrate, he explained that the New START treaty will expire in February 2026 and the resumption of nuclear tests "will be another nail in the coffin of nuclear disarmament and nuclear arms control." In addition, he believes that "this is a very serious issue, very irresponsible and very confusing."

Additionally, he believes that in this regards South Asian nuclear rivals, India and Pakistan, would also be interested in conducting nuclear tests to improve their nuclear weapons technologies. However, this prediction might not be entirely true. Pakistan has a well laid out nuclear test policy. Also, Pakistan was not the first state in South Asia to test nuclear and will not be the first country to resume nuclear testing in the region.

Pakistan prefers peace over conflict, which is very much evident after the Pahalgam incident where Pakistan offered investigation, yet India opted for attacking its nuclear rival. Other than that, India was the first country in South Asia that conducted nuclear tests to which Pakistan had to maintain its deterrent posture. Even after the defeat in Operation Sindhoor, India focuses on increasing its warheads, while Pakistan is focusing on diplomatic relations.

On the other hand, the U.S. and Russia have around 90% of the world's total number of nuclear weapons; going for more would be a naïve act, as it would come without considering its implications. Jamie Kwong, a fellow in the nuclear policy Programme at the Carnegie Endowment for International Peace, believes that this situation would have a domino effect where once again states would race towards securing themselves through nuclear arms, making nuclear disarmament almost impossible.

The resumption of nuclear testing by the U.S. could prompt not only China and Russia to do the same but also other states that possess any threat and in the realist paradigm, threat and uncertainty always subsists in the international arena. To illustrate, If the U.S. starts testing its nuclear, Russia too will follow and so would China. In this scenario, it would be hard for disarmament regimes to stop India. Thereby, India would get a chance to

enhance its aggressive posture and offensive nature by testing nuclear, since it was the first to nuclearize South Asia. In this situation, Pakistan would have no choice but to follow the defensive outlook for deterrence purpose. However, Pakistan would not be the first to test nuclear.

Experts believe that the statement by the U.S. president was provoking a nuclear arms race and could raise the risk factor in an already dangerous moment where the majority of signs displayed that the world was heading in the direction of a nuclear arms race – even though it has not yet begun. With such policies the world faces a rising nuclear threat. Currently,

the world is full of conflict such as a flare-up between India and Pakistan (both nuclear states),

the Ukraine-Russia war, and the Israel-Iran confrontation- where Israel has a policy of neither confirming nor denying the

acquisition of nuclear weapons and Iran is a country the West accuses of trying to build nuclear weapons, which it denies. Such statements,

if put into actions, can further enhance uncertainty and states would rethink their decisions towards nuclear non-proliferation. In this regards, executive

director of the Washington-based Arms Control Association, Daryl Kimball, believes that the U.S. reopening of nuclear testing might be “a mistake of historic international security proportions”. One can only hope that in such a situation peace and nuclear non-proliferation prevails rather than nuclear arms race.

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Debunking the Claims on Pakistan's Nuclear Testing

Samra Hamid

In a recent interview on November 2, 2025 US President Donald Trump has reignited debate over Pakistan's nuclear activities. Trump stressed that Pakistan, China, Russia, and North Korea are "silently testing nuclear weapons". Utilizing this statement as a justification for the US to resume its own nuclear testing after a 33-year moratorium. He accentuated that such tests are "covert" and "undetectable," implying that Pakistan is involved in violations of global security measures.

Pakistan's nuclear program concluded in its only confirmed explosive tests, Chagai-I and II, on May 28 and 30, 1998, which were conducted at the Ras Koh Hills in Balochistan. Pakistan has clarified that the 1998 tests were a direct, defensive response to India's secretly done Pokhran-I and II tests earlier that month. These six simultaneous underground detonations yielded an estimated 9-40 kilotons of TNT

equivalent, registering seismic signals of 5.0 on the Richter scale.

Nevertheless, a study of classified U.S intelligence reports, seismic surveillance sites of the CTBTO, and Pakistan official announcements shows no credible evidence of nuclear explosive tests by Pakistan after 1998. Instead, these sources confirm that Pakistan has had a unilateral testing moratorium since 1998 and focus on modernizing its arsenal rather than conducting new tests. In contrast with India, which only had a form of provocative testing using secret tests in 1998, taking every possible evasion of the detection of its deeds, preparing them at night and disguised, to trick CIA satellites.

The U.S. intelligence self-confessed later that they were embarrassed by the inability to verify such activities, and satellite pictures were characterized as clear as

mud. This trend of discrete Indian experimentation – a continuation of the 1974- Smiling Buddha “peaceful bomb detonation, which concealed the development of weapons- put Pakistan in a reactive stance to retain believable deterrence to preclude an existential danger. More to the point, the nuclear posture of Pakistan has been strictly defensive in nature in response to the aggressive and covert testing history of India.

As the U.S. accusations have apparently been selectively applied against perceived enemies only, whereas proliferation by its strategic ally India, an aggressive nuclear state, consistently developing and enhancing its nuclear program, has remained unaccountable, with no recorded prevention measures against it.

Since 1998, Pakistan has maintained a voluntary moratorium on further nuclear explosive testing, explicitly linking it to the

entry-into-force of the CTBT. Although not a CTBT signatory (like India and North Korea), Pakistan voted for the treaty’s adoption in 1996 and has reiterated its support for the treaty’s objectives, including non-proliferation and verifiable bans on explosive tests.

In response to the remarks of November 2025 by Trump, Pakistan’s foreign office spokesperson Tahir Andrabi officially reaffirmed Pakistan’s alignment with the 1998 moratorium and CTBT on November 3. Also stating that “Pakistan was not the first country to conduct nuclear tests and will not be the first to resume them in the future!”.

This is reminiscent of the Foreign Minister Abdul Sattar’s 2000 statement that Pakistan will not carry out any more tests until there is an extraordinary circumstance that threatens Pakistan’s security interests. Pakistan has not mentioned any such extraordinary event since 1998, and this

indicates its non-aggressive stance in the backlash of Indian continued armament build-up and border aggressions.

The U.S. officials themselves often quoted Pakistan's nuclear program as expanding, not in terms of testing the bombs but increasing in its quantity and delivery systems, further explaining that the statement by Trump was rather stated due to a lack of knowledge rather than the ground realities of Pakistan's nuclear program.

Furthermore, the 2025 U.S. Defense Intelligence Agency (DIA) global threat analysis rates Pakistan at having around 170 warheads, focusing on "nuclear modernization" through tactical warheads, missile development, and plutonium/HEU production at sites such as Khushab. Even if that is the case, it is evident that Pakistan is compelled by the aggressor state, India, which is an existential threat to Pakistan. In

such a case, Pakistan is directly or indirectly involved in the security dilemma.

However, this examination is in sharp contrast with laxity by the U.S concerning India, one of the strategic counterchecks of China. According to an international research institute, SIPRI, India is not only actively modernizing its nuclear arsenal but also developing missiles at home, while also strengthening its nuclear triad of land-based, air-based, and sea-based delivery systems, thereby becoming the fastest-growing nuclear-weapon state in South Asia.

Reporting of the programs by the two countries in the 1980s-1990s, which was declassified, showed U.S. apprehension regarding the programs of the two countries. However, since 1998, the sanctions have been lifted against India (through the 2008 civil nuclear agreement) but against Pakistan, which creates the

impression of preferential treatment of allied states.

India's growing 100 GW nuclear program by 2047.

The unfounded nature of Trump's assertions is typical in that they exaggerate the threats posed by rivals such as Pakistan. However, the US clearly underestimates New Delhi, favoring its geopolitical interests against China, by letting India increase the covert development of weaponry. Not only this, but they have started advancing their weaponry by adding new capabilities such as MIRV-capable Agni-5 and canisterised missiles.

Lastly, the threat of terrorism and smuggling by Indians, despite not being a member of the NPT and having little to no experience as an IAEA guardian. The nuclear program of Pakistan is in line with minimum credible deterrence against India, following all security protocols, with no nuclear theft reported till date.

This bias is further extended to not noting the security weaknesses of India, including its vulnerability to nuclear theft of around 90-110 bombs at various locations. Also, sites are weakly patrolled by security personnel with less than 5 years of experience in the security protocols for nuclear assets. The US also completely ignored the emergence of cyberattacks on

The US only highlighted the secrecy of nuclear explosions while completely ignoring the fact that the emerging threat in the existential nuclear domain is the emerging technologies. In such a case, India is the most prominent country advancing its nuclear arsenal and missile capabilities, resulting in regional and global instability. There are also chances that the US is intending to retest its nuclear capabilities to reaffirm its credibility to India, as its missile Agni VI with a range of 8,000-12,000 km, which can reach to US quite

easily. Yet, there is no accountability for India's advancements in weaponry and nuclear weapons.

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The Impact of the India-US Growing Strategic Partnership on South Asia

Harsa Kakar

In October 2025, the United States and India agreed to a 10-year defense partnership. It is an attempt to renew defense relations between the two countries. The partnership developed from past defense collaboration agreements between the US and India that included exercises, technology exchanges, and manufacturing collaboration. While the partnership received considerable media attention, it represents evolutionary, rather than revolutionary progress.

The partnership is a result of a long-standing history of defense partnerships but does not represent a paradigm shift in defense collaborations. However, the nature of this defense collaboration continues to evolve concerning the relationship of Pakistan to the United States and India. Examining the India-US

defense partnership with an eye to the history, agreement details, and overall implications is worth the effort. Chanakya's philosophical concepts, which are discussed below, are also instructive.

History

The United States and India are not new defense partners. The current agreement is an extension of those older agreements. This series of partnerships began in 2002 under the General Security of Military Information Agreement (GSOMIA), the Communications Compatibility and Security Agreement (COMCASA), the Basic Exchange and Cooperation Agreement (BECA), and the Logistics Exchange Memorandum of Agreement (LEMOA).

The most recent agreement expands the areas of cooperative defense to cyber and maritime security issues. This agreement will help bring the American and Indian militaries into alignment and make their defense capabilities and strategies align more effectively.

This US-India defense partnership is one of the ways that India can move toward greater defense independence and create “self-reliant” defense industries. The goal of this effort is to encourage the development of defense systems produced domestically or developed through technology transfers from other countries and to allow India to produce and export these products globally.

The US-India partnership also anticipates India having an upgraded military, being able to project maritime power more effectively, and enhancing its ability to deter aggression. The improvements in India’s military capabilities and its nuclear

posture align with India’s pursuit of strategic autonomy; however, India’s evolving security environment is beginning to mirror the American security environment.

The partnership between the US and India will also help to reinforce the Quad framework (US, Japan, Australia, and India) as a key element of American Indo-Pacific Strategy, creating a free, open, and rules-based regional order. It is also anticipated that increased defense cooperation between the US and India will provide an enhanced collective deterrent against Chinese assertiveness and will enable the US and India to conduct more frequent and extensive joint naval and air exercises, such as the Malabar exercise.

Similar to other forms of strategic wisdom that are based upon the doctrines of Chanakya, the US-India defense agreement appears to reflect the concepts of not engaging directly with an adversary,

depleting an adversary's resources, and winning when the circumstances are appropriate. As such, it appears that India is employing a similar approach (building partnerships, establishing a defense industrial base, attaining strategic independence, and then waiting until the opportunity presents itself to engage) with similar replenishment concepts (economic and diplomatic) that were outlined in Chanakya's playbook to allow India to capitalize on a potential weakening of the enemy due to internal politics.

While this agreement does provide a framework for cooperation and addresses some of the regional security concerns, including India's negative view of China as an aggressive actor in the Indo-Pacific, the agreement does not establish a legally binding security arrangement, like the North Atlantic Treaty Organization (NATO).

Rather, the agreement reflects an increasing level of strategic convergence

and represents a cooperative structure for defense. Media coverage of the agreement frequently exaggerates the significance of the agreement, while downplaying the fact that defense relationships between the US and India are not new and have little impact on the strategic balance between India and Pakistan.

While some in Pakistan see this latest agreement as a threat, the best option for Pakistan is to employ diplomacy, act in good faith to prevent future terror attacks in Indian territory, and avoid escalating tensions due to a false perception of encirclement. Positive dialogue with India and other regional actors will decrease the chance of conflict and build trust.

The US can serve as a stabilizing force to create dialogue between India and Pakistan and enhance regional cooperative mechanisms. Regional actors, such as China, Bangladesh, and Sri Lanka, etc., need to develop new policies to

maintain an equilibrium in South Asia and not take action that exacerbates existing regional tensions.

The latest US-India agreement serves as a foundation for increased cooperation and may benefit regional stability and the overall security of the Indo-Pacific region. The degree to which this defense agreement has the ability to positively contribute to the strategic stability of South Asia depends on successful implementation of its provisions and the

degree to which the United States and India can work with other regional states to address emerging challenges.

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Nuclear Energy for Sustainable Development

Safia Gull Kakar

Historically, the foreign policy of India has been shaped by the principles of the Non-Aligned Movement (NAM). Due to the Cold War and bloc politics, India sustained its non-alignment stance without giving any strategic notion for decades. Under the NAM, its naval forces remained confined to its territorial waters for defensive needs.

Despite the great geopolitical and strategic significance of the Indian Ocean, Prime Minister Nehru wanted to pursue the NAM as the primary foreign policy goal. In the 21st century, Indian foreign policy has evolved from NAM to strategic dominance. From Nehru's policy of restraint to Modi's hegemonic pursuits, considerable development has been made in the Indian Navy.

Indian Maritime strategy maps its hegemonic role and dominance in the region. James Holmes puts Indian maritime strategy into action in three phases: the free-ride, constable, and

strongman. Holmes argues that this strategy is the Indian version of the Monroe Doctrine, which goes beyond Indian defensive measures and territorial waters. India seeks to define its sphere of influence in the IOR with hegemonic posturing, but its cost becomes provoking for other countries due to a shift in the regional balancing.

In the colonial era, the British Navy explored the oceans for colonization, trade, and the mobilization of its forces. The IOR region played a central role in the making of the great empire, as it connected British colonies to the British metropole. Sea lines of communication were easy to control from Africa to Asia by controlling choke points and straits.

The colonial-era British Navy became an inspiration for the Indian Navy in the early 21st century. Transformation in the Indian Naval forces is not sudden: it is envisioned in the Indian manifest destiny

for expansion in the IOR. It is executed in accordance with its first maritime diplomacy of 2004-2007. As in the first phase of Indian maritime strategy, India will jump into the IOR as a free rider, which is manifested in the Indian maritime strategy of 2004-2007 for exploration purposes.

In the second phase, its strategic role shifts from free rider to constable, as envisioned in the maritime strategy of 2009-2015. In the second phase, India aims to extend its mobilization to reach the high seas beyond its Exclusive Economic Zone (EEZ) of 180 nautical miles for power projection to make an assertive claim of the Indian Ocean as its primary area of interest.

In 2015, the third and current phase of the Indian maritime strategy was revised with the Maritime Doctrine, which portrays India as a “Strongman” and stresses the hegemonic characterization

of India in its front yard. With a strongman role, India aims to be the first responder of any adventure in the Indian Ocean.

The term Indo-Pacific also became popular after 2015, which underscores its maritime strategy and the Indian Ocean as an India-centric area. But what alarms the bell for the entirety of South Asia is the complexity of these conflated ideas, which integrate into the strategic and security domain of South Asia.

The number of aircraft carriers, submarine fleets, and sea-launched delivery systems has advanced in the naval inventory of India, fueling the military asymmetry and shift in the strategic equilibrium of the region. While to strengthen its position in the IOR, India seeks alliances and strategic partnerships with like-minded countries like the QUAD.

Through the third phase of maritime doctrine, India adopted a more assertive posture with active blue water naval forces. In this phase, India has launched an indigenous carrier, INS Vikrant, commissioned in 2022. A nuclear-powered engine submarine SSBN Arihant, which enhances its second-strike capability with K-series missiles, K-4 with 3500 Km, K-5 (IRBM), K-6 (ICBM) with ranges of 5000km and 8000km respectively, is under development.

India's sea-based delivery system is advancing rapidly, while Pakistan's strategic response to India's growing sea-based nuclear forces has been limited to Babur-3, a submarine-launched cruise missile with a range of 450km, which depicts Pakistan's strategic measures for defensive purposes and deterrence stability. Apparently, this provides Pakistan a modest form of second-strike capability from the sea.

As India seeks to attain strongman status, the future of maritime security of South Asia hinges on the responsible actions of India in upholding the obligations of respect for the sovereignty of Island nations and neighbors in South Asia.

Particularly, its long-standing rivalry with Pakistan, India's strongman role, increases the risk of a deterrence crisis and an arms race crisis in the oceans. Its self-determined area of interest is shielded by multi-layer defense systems, missiles with extended ranges, submarines, and aircraft carriers actively mobilizing in the blue waters.

In contrast, Pakistan's efforts to stabilize deterrence are restricted to defensive posturing. Clausewitz's framework of value tells us that the investment in a certain enterprise is set by political entities that determine the duration and magnitude of war.

Given that no South Asian state competes with India in the arms race in the Indian Ocean and India has witnessed twice the resolve of Pakistan through aerial engagement over the last decade, Clausewitz's framework reflects that the domain of conflict evolves with intent and capabilities, and India is willing to extend strategic competitions into the maritime domain.

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Nuclear Energy and Pakistan's Quest to Bridge the Energy Gap

Lucky Azeem

Pakistan faces a persistent energy shortage that goes beyond power cuts. It means gloom in hospitals, receding industries, disturbed classrooms, a declining economy, and an uncertain future of energy security.

Pakistan's energy sector is highly dependent on imported fossil fuels for power generation, which comes at a high cost, burdening its economy and posing risks to its environment.

In addition, Pakistan is at a crossroads, where the climate crisis is one reality, and the lack of human development is another.

With a growing population and the importance of the technological era, the national power grid is strained, even after spending a fortune.

If the crisis remains unaddressed, it could further affect the quality of life of the citizens. Pakistan's gradual shift towards a more diversified power mix includes hydel,

solar, wind, and nuclear power. The aim is to eliminate inefficiencies in existing transmission and distribution systems, supply cleaner, more reliable, and affordable electricity.

Currently, Pakistan has six operational reactors, including K-2 and K-3 at Karachi, and C-1, C-2, C-3, and C-4 at Chashma, with a total power generation of about 3262-megawatt electric (MWe). The C-5 power plant is currently under construction and is estimated to add 1,100 MWe, significantly increasing nuclear energy's contribution. Under the supervision of the

Pakistan Atomic Energy Commission (PAEC), the first Nuclear Power Plant (NPP), K-1, completed 50 years of safe operation before being completely shut down for decommissioning on 1st August 2021.

According to the National Electric Power Regulatory Authority (NEPRA 2022),

domestic nuclear energy production helped Pakistan save \$3 billion compared to importing oil, \$2.2 billion on natural gas, and \$1.6 billion on coal in 2022. By March 2022, the capacity of the NPPs stood at 3530 MWe, which supplied 12,885 million units of electricity to the national power grid.

This indicated a 39% increase in MWe and an 82% increase in units supplied compared with the previous year. Similarly, the Economic Survey of Pakistan 2024-2025 indicates that these years saw installed capacity for NPPs at 3,620 MW, with a 7.8% share. In FY 2024-25, nuclear plants accounted for 19.1% of total electricity generation.

Bridging the energy gap requires a more self-efficient, resilient, and diversified structure. Including advanced production and use of cleaner, renewable energy, such as nuclear energy, offers multiple benefits. Unlike sources such as solar or

wind that are weather-dependent, nuclear power generation is more reliable. It helps to reduce energy dependence on foreign imports, broaden the resource base, expand energy supply, and increase the stock of technology and capital.

It also indicates long-term development across multiple areas to boost socioeconomic development, notably by mitigating the climate crisis, easing water scarcity, and thus advancing human development. Future projects such as Chashma 5, a Hualong One (HPR1000), China's third-generation Pressurized Water Reactor (PWR), are more significant.

Its advanced passive safety system, double-shell containment, and core catcher, along with its aim to add 8000 MWe to the national power grid by 2030, dominate existing technologies. Yet beyond its engineering splendor lies a deeper human aspect.

However, adopting nuclear power also carries risks. Pakistan has consistently ranked among the most vulnerable countries in the climate risk index, despite contributing less than 1% of global carbon emissions. After incidents like Fukushima and Three Mile Island, safety concerns increased; however, nuclear power plant designs are continually being improved and modernized to ensure safety. NSG questioned China's supply of C-3 and C-4. While contracts of C-1 and C-2 were signed in 1990 and 2000, respectively, before China joined the NSG. However, China dodged it by grandfathering the new units, and their arrangements were consistent with those of the first two units. Nevertheless, Pakistan also recognizes the importance of nuclear safety.

Pakistan has a remarkable record of nuclear safety, which prevents nuclear accidents, with an established nuclear regime and regular checks and balances

from the International Atomic Energy Agency (IAEA). Although a non-signatory to the Non-Proliferation Treaty (NPT), Pakistan is one of 35 members of the IAEA's Board of Governors. PAEC also responsibly manages radioactive waste. The consistency in this matter can help Pakistan take gradual steps towards energy security.

The potential of these developments to enhance citizens' quality of life is crucial. Each step towards the inclusion of nuclear power generation holds the strength to shape a better future. Every unit of cleaner, cheaper, and more reliable energy would not just power homes, industries, and classrooms, but ignite hopes and audacity for a healthier, happier, and more secure future for Pakistan.

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Terrorism at Bondi Beach!

Aadersh Hamza

Sajid Akram and Naveed Akram – the identity of the father-son duo is finally shaping up after a relentless propaganda and disinformation campaign. The two terrorists are identified to have Indian roots – the father being an Indian national, who travelled on an Indian passport to multiple countries, while the son was born in Australia to a father of Indian origin.

However, this identity reveal came after much of the propaganda that was floated by Indians and amplified by the Western right-wingers. After hours of the attack, a familiar storyline began circulating on social media, framing the attackers as Pakistanis, and all that without any shred of evidence.

The propagandists used photos of random Pakistanis living in Sydney and accused them of the attack, causing serious harm to their lives. This was shamelessly echoed

and amplified by some of the responsible individuals around the world. The claim appeared confident, repetitive, and premature – long before official confirmations on nationality or documentation were available.

A typical Indian playbook mechanism is whenever a terrorist incident happens across the world.

Naveed Akram, a Pakistani by a similar name living in Sydney, shared his experience of being wrongly accused as the attacker.

The Guardian reported, “Akram described his ‘shock and horror’ when he saw that accounts were sharing his photo with hundreds of thousands of followers and was trending on X.

It was alarming for me,” said Akram. “As soon as I saw that my photo was being shared as the shooter, I came home instantly, as I knew it was very dangerous. I was so traumatized, and I knew I needed to try and get the message out that this wasn’t me.”

The denial from the Pakistani side was unfortunately too late. Even as of now, no official condemnation or correction has come from Pakistani authorities on the massive disinformation campaign, which not only tarnished the country’s image but also made many of its overseas citizens vulnerable to apparent hateful reactions from the world.

The International media finally clarified the attackers’ nationality, but the damage was already done by then.

Disinformation does not need to be permanent to be effective – it only needs to be first. In the early hours after an attack,

audiences form impressions, media frames solidify, and political instincts harden. Corrections, even when issued by credible outlets, rarely travel as far or as fast as the original claim.

India understands this dynamic well. Its media ecosystem – one of the loudest, fastest, and least restrained in the world – functions as a force multiplier.

Assertions made on Indian television panels or digital platforms quickly migrate into international discourse.

The basic standards of journalism fall short here; the claims made by Indian Media often fail to get the scrutiny that they deserve, and by the time facts are checked, the propaganda would have already seeped in.

This episode underscores that the world today is threatened by India at multiple fronts. At the physical level, there are individuals like Sajid Akram who are a

threat to the peace worldwide, and at the information level, there is a massive state-aligned media, which would propagate anything or everything that suits its narrative by caring less for the rest of the world and its ethical standards.

The second threat is subtler but no less dangerous. Disinformation corrodes trust, fuels communal suspicion, and weakens the very institutions meant to respond to violence rationally.

We see how manipulatively India not just avoided any fingers being raised on it, with its citizens being involved in terrorism, it also diverted the propaganda towards its rival Pakistan,

which had nothing at all to do with Sydney Bondi Beach Terrorism.

The world unfortunately, fell for its social media disinformation campaign, and by uncritically absorbing such narratives, it

became a participant – willing or not – in their spread.

This, however, needs to be understood by the world that it is not about India vs Pakistan only. It is about our mutual ethical standards and about the collective peace of the global village we live in.

It is an argument about power without restraint. States that combine diplomatic reach, media volume, and ideological polarization can shape reality faster than facts can catch up.

When those states are treated as “natural allies” or “democratic counterweights,” their narratives often receive a pass, something that happened in the aftermath of the Bondi attack.

This attack should serve as a warning that terrorism today is not only carried out with weapons; it is completed with narratives. Therefore, there is an added responsibility on all of us not to become the tools in the

hands of these terror groups – the propaganda can only be counted as amplification of any misleading apologia if not complicity itself.

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The Canada-India Uranium Deal

Barrira Gul Kakar

Canada and India are set to finalize a Uranium export deal worth \$2.8 billion that would run for 10 years. Under this deal, Canadian Cameco Corp would supply uranium to India, marking a significant change in their bilateral ties after two years of diplomatic suspension.

The Canadian Prime Minister Mark Carney and the Indian Prime Minister Narendra Modi agreed to restart their stalled talks on a high ambition Comprehensive Economic Partnership (CEPA) on the sidelines of the G20 summit on 23 November 2025, in Johannesburg, South Africa. However, the deal has significant implications for the South Asian regional security, balance of power, and non-proliferation regimes, as it could increase India's potential to expand its energy security and nuclear capabilities

by allowing an adequate supply of uranium from Cameco Corp, Canada.

The consequences of this agreement in South Asia could go beyond economic engagement, where centuries-old rivalries still persist with Pakistan and China, which could lead to risks of regional instability and nuclear escalation.

Historically, Canada and India have been involved in nuclear cooperation for decades. In the 1950s, under a bilateral agreement, Canada supplied heavy water reactors known as CIRUS and Rajasthan Atomic Power Station (RAPS-1 and RAPS-2) to India for peaceful uses.

However, the agreement broke down immediately after 1974, when India

conducted its first nuclear weapons test, diversifying its civilian nuclear program. As a result, Canada suspended its nuclear cooperation with India. After years of stalled relations, in 2010, New Delhi and Ottawa signed a nuclear cooperation agreement (NCA), allowing export of nuclear equipment and technology only for peaceful civilian purposes, under the surveillance of the International Atomic Energy Agency.

On September 6, 2008, as part of the deal, the United States also secured India-specific exemptions in the Nuclear Suppliers Group (NSG) regulations. Washington persuaded the members of the NSG to relax the long-standing restrictions on nuclear trade with India. It made it possible for New Delhi to pursue similar arrangements with all the NSG member states.

Thus, the consequences of the nuclear deal extended far beyond the dynamics of

US-India bilateral relations. As a result, just two days after the US Congress approved the nuclear deal, India signed a similar agreement with France, the first country to have such an agreement with India. Subsequently, India has secured nuclear deals with many other NSG members, including the UK, Canada, South Korea, Kazakhstan, and Germany.

Under a civilian cooperation agreement in 2008, the NSG allowed India, despite being a non-NPT state, to access nuclear technology from the NSG members. This shows the continuation of discriminatory trends in the global nonproliferation frameworks.

Despite India's poor record of nuclear security and safety, as evidenced by the persistent nuclear theft incidents, the US paved the way for India to import uranium by giving the critical NSG waiver in 2008. India's continued import of uranium and extensive facilities further increase the risk

of nuclear theft and the flow of nuclear material into the illicit market.

The uranium export deal between Canada and India may have much more strategic and security consequences for South Asia.

The Canadian uranium imports into India to serve the civilian reactors would allow the country to release its domestic uranium deposits for nuclear weapons development and the stockpiling of highly enriched uranium (HEU).

This could create a strategic imbalance and trigger an arms race in the region, leading to regional instability and crisis escalation.

The deal could have significant implications for the South Asian regional security, balance of power, and non-proliferation regimes. By allowing India an adequate supply of uranium from Cameco Corp, Canada could increase India's potential to expand its energy security and nuclear capabilities.

The renewed deal could challenge and undermine the nuclear nonproliferation norms by conveying that major powers receive exemptions while continuing to support their allies for their geopolitical interests.

For example, in the past, states that were not part of the NPT, such as India, a non-NPT state, were excluded from nuclear trade, but now exceptions have been made, as in the case of India, a non-NPT state. Such agreements also encourage other states to pursue similar nuclear deals, such as Iran, and reduce the universal concept of nuclear non-proliferation regimes.

The Uranium export agreement between India and Canada is a significant geopolitical development. It strengthens India's nuclear program, specifically its second-strike capability, which directly challenges and complicates China's

deterrence posture and its no first use (NFU) policy.

China perceives this modernization as a twofold strategic problem on the basis of the extended US-China rivalry and its local rivalry with India, and the contract itself as a possibility of a major re-orientation of Canada and other Western nations, now giving their choice to strategic alliances with India. The agreement also supports India in the production of naval assets in the Indian Ocean. This type of development would make competition in the maritime sector.

The Uranium export deal between Canada and India shows the persistence of discriminatory trends in global frameworks. The deal could directly lead to a power imbalance in the region, pushing towards an increasing nuclear arms race in South Asia.

The major powers, to serve their geopolitical and strategic interests, again weaken nonproliferation frameworks, thereby contributing to regional instability.

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The Tech War as a Contest over Economic Futures

Gulzar

The world is witnessing a new kind of conflict, not fought with tanks but with chips, data centers, and AI. The driving factors are primarily economic rather than military. Whoever controls the architecture of artificial intelligence and semiconductor production will have enormous influence on the 21st-century global economy.

The centre of this competition is cloud infrastructure. According to the latest data, Amazon Web Services (AWS), Microsoft Azure, and Google Cloud collectively account for 63% of the cloud market. Alongside hosting the world's data, these companies power the AI tools that governments, businesses, and institutions depend on. Effectively, nations

pay the US-based companies for access to cloud infrastructures and AI applications.

The same imbalance is evident in the flow of money and investment in AI. Global private investment in AI reached \$252 billion in 2024, with the US accounting for the largest share. A country once seen as the US's only real competitor, China receives far less, around \$9.3 billion.

This concentration of capital means that a handful of countries are building or holding the world's most powerful AI models, data centers, and supercomputers. Meanwhile, the cost of training frontier AI models has increased due to limited access to advanced chips and compute capacity.

These nations are locked and at risk of being excluded from the next industrial revolution before it even begins, as major models now require tens of thousands of GPUs and months of computation.

This economic divide is further strengthened by control over semiconductors. Nearly all of today's world's most advanced chips are produced by Taiwan's TSMC and South Korea's Samsung. From AI models to fighter jets, these chips help in powering everything. Firms like Nvidia, AMD, and Apple make the US the leader in chip design, but depend on Asia for manufacturing.

China still cannot produce advanced chips domestically despite spending over \$150 billion in subsidies since 2014. This is why semiconductors have been considered as the new oil: those who will have control over them will have superior capability over others to build intelligence, weapons, and wealth.

Inside this new digital pyramid, Middle powers are fighting their own battles. Regulation like the EU AI Act reflects Europe's aggressive approach to AI, but for more than 70% of its computing needs, Europe still depends on foreign cloud providers. India is investing billions into domestic chip production through the India Semiconductor Mission to position itself as the world's AI services hub.

In partnership with TSMC and South Korea, Japan is upgrading its semiconductor sector and focusing on next-generation memory and AI chips. The Gulf countries are also entering this competition: Saudi Arabia plans to invest \$40 billion in global AI projects and to shape regional AI development. The UAE has developed its own Arabic large language model, Jais.

But much of the Global South is at risk of being left behind. Africa, for over 90% of its AI computing power, depends on foreign

cloud providers, and Latin America is still importing nearly all semiconductor technology. These regions without local compute, data centers, or frontier model development could become entrenched “digital peripheries” that export data and pay regular fees to foreign firms to consume AI built elsewhere. As a result, we are moving to a future where economic inequality is no longer just about income, but about access to intelligence and technology itself.

This is why today’s tech war is not just a geopolitical contest, it is a battle over economic futures. Nations that own cloud, chips, compute, and AI will enjoy faster productivity growth, stronger tech industries, and higher strategic autonomy.

They will be considered as the Digital Core. In contrast, those that don’t will depend on foreign companies for everything from healthcare algorithms to military logistics and will be considered as Digital

Peripheries. In the 20th century, countries that lacked factories fell behind. In the 21st century, countries that lack computing will fall behind.

The world is dividing into digital cores and digital peripheries. Only countries that invest early in semiconductors, cloud infrastructure, and AI research will shape the next wave of global wealth. For others, economic and technological development may become dependent on external actors.

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25 Years' Journey and Beyond!

Alamgir Gul

In the past quarter-century, the Pakistan Nuclear Regulatory Authority (PNRA) has been transformed into an organization with a mission, goals, and an unbending commitment to the safety of the population and the environment. Its direction also illustrates not only a growing regulatory system but also supports Pakistan's national objectives to coordinate national development with international criteria for nuclear regulation.

It is not surprising that, after the expansion of the scope and complexity of the civilian nuclear power programme in Pakistan, growth was anchored in the PNRA with a strong safety culture, scientific competency, and a global image.

The development of nuclear regulation in Pakistan dates back well before the actual formation of PNRA in 2001. Starting with the Pakistan Nuclear Safety Committee in 1965, the nation began transitioning from a committee-based to an institutional regulatory framework, initially with DNSRP in 1984 and PNRB in 1995. This gradual development laid the foundation for a legally authorized, technologically competent, and autonomous national regulator, which in turn led to the establishment of PNRA.

As Pakistan's nuclear power infrastructure grew, the role of the PNRA, its custodian, also increased. There are six civilian nuclear power plants in operation in the country, with a total capacity of 3,530 MWe,

producing a record 21.7 TWh of electricity in 2024.

These facilities have four units at Chashma (C-1 to C-4) and 2 large ones in Karachi (K-2 and K-3), with the first power reactor in the country, KANUPP-1, being decommissioned in 2021 after 40 years of operation.

The growing share of nuclear energy in Pakistan's electricity mix underscores its strategic importance in resolving chronic energy shortages, reducing carbon emissions, and ensuring economic stability. However, the same expansion also increases the regulatory awareness—something that PNRA has been undertaking with care.

The fact that PNRA has maintained a perfect safety record is one of its greatest successes: there have been no major nuclear incidents during its time in operation. The result is not incidental and

procedural, but a cumulative product of the ongoing inspection, monitoring, and technological updating.

With over 365 licensed specialists and over 100 inspections annually, PNRA has instilled a culture of safety throughout its operations, including designs that are approved, buildings that are used, and regular safety assessments. This culture of obedience and active monitoring has made Pakistan a responsible nuclear state and has assured people that nuclear plants are safe.

To expand the nuclear sector in Pakistan, regulatory control was insufficient; it required building the local scientific and technical capacity. PNRA has been at the forefront of creating institutions such as the National Institute of Safety and Security (NISAS), established in 2014. NISAS operates as a national center of excellence for training engineers,

operators, regulators, and emergency responders.

Pakistan has managed to establish self-sustaining nuclear safety systems that align with international best practice, develop local expertise, and gradually eliminate external dependence. This institutional growth shows that the mandate of PNRA is not purely regulatory but also developmental, educational, and futuristic.

Another characteristic observed in PNRA's journey is international engagement. The cooperation of Pakistan and the International Atomic Energy Agency (IAEA) has greatly enhanced during the last twenty years, resulting in international appreciation. PNRA was positively assessed by the IAEA in 2022, and it was stated that the regulatory systems in Pakistan are in compliance with global standards, indicating high levels of transparency and efficiency.

Pakistan took a stronger role as the President of the Convention on Nuclear Safety (CNS) Review Meeting in 2024, which is itself a milestone that the world believed it had the regulatory capacity. These achievements demonstrate that PNRA has transformed into an international player actively engaged in operational global nuclear safety standards rather than a national one.

The journey is also an account of the flexibility of PNRA, regarding technology, administration, and planning. As the technology of nuclear power continues to develop, better reactors, increased standards of computational core analysis, and the creation of additional standards of radiation protection, the regulatory environment must be in a state of flux.

The PNRA role has been transformed to be more foresighted about the challenges ahead- cybersecurity threats to the nuclear plants, vulnerabilities due to the changes in

climatic conditions such as heatwaves and floods, and the digitalization of the instrumentation and control activities.

The strength of a regulator is not confined to the possibility of enforcing the existing standards; the willingness to take risks in the future is also necessary, and PNRA has demonstrated the ability to plan long-term and timely reforms.

Moreover, nuclear power plants are not the only areas in which PNRA can contribute. It has a mandate to protect against radiation in medical, industrial, agricultural, and research fields. The mission of the authority in the safe utilization of radiation in the country is also becoming very visible as more and more radiation finds use, particularly in medical diagnosis and treatment of cancer. Such a broad. Regulatory scope contributes to PNRA serving as a guardian of civic wellbeing at the daily and strategic levels.

It is also important that the human aspect of the development of PNRA exists. The organization has also evolved within a span of twenty-five years, as a professional community whose features include technical competence, moral accountability, and service to the nation.

The majority of regulatory officials are working under harsh conditions, performing complex inspections, conducting emergency rescues, and ensuring no cost is incurred in terms of safety. Their services are the backbone of Pakistan's nuclear safety system, and they show that the quality of regulation is ultimately human-determined.

The new national needs and trends in the global world will impact the future stewardship of the organization, with the future of PNRA in sight. Pakistan also considers using nuclear energy to reduce consumption of fossil fuels, balance supply, and meet climate commitments.

It is already subject to the prospects of projects for small modular reactors (SMRs) or other units at existing sites. This will help more in the improvement of the regulations by PNRA, its technical capacities, and the support of the citizens.

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The Shaky US-India Defense Deal

Shahzadi Irum

Who would have thought that a few months after the USA's economic blows, India would be shaking hands with it over a decade-long defense pact? Washington, once accusing New Delhi of fuelling Moscow's war machine by buying cheap Russian oil, is now hailing it as a key strategic partner. The speed of this transformation is less diplomacy and more design. What's being celebrated as cooperation feels more like containment. The USA has not built a bridge; it's tightened the leash. By turning economic pressure into strategic persuasion, Washington has managed to pull India into its sphere of influence, not through trust, but through tactics.

This carefully orchestrated shift was made official on October 31 in Kuala

Lumpur during the 12th ASEAN Defence Ministers' Meeting. India was represented by Defence Minister Rajnath Singh, who hailed the 10-year pact as a major step forward in technology, intelligence, and security cooperation. The USA, through Defense Secretary Pete Hegseth, described the agreement as a cornerstone for regional stability and deterrence, signalling growing strategic alignment between the two nations.

Yet the broader picture tells a different story. Just months earlier, Washington had hit India with punishing tariffs on its exports, along with a 25 percent penalty on the purchase of Russian oil and arms. What is presented as a partnership of equals is, in reality, a deal forged under pressure, one that draws India closer to the US orbit while subtly limiting its freedom to act independently, raising questions about

who truly gains from this “milestone” in bilateral relations.

The deal may appear to be mutually beneficial, but its true focus is on Washington’s interests. Not long ago, both countries stood on opposite sides of a trade war, with Washington using tariffs and trade threats as leverage to bend New Delhi’s choices. A closer inspection reveals that the USA was not particularly concerned about India purchasing from Russia; what truly bothered them was that India was not buying from the USA. Under pressure from tariffs and trade threats, India unexpectedly signed a decade-long defence agreement, cloaked in words of “cooperation” and “strategic partnership.”

In reality, the deal is less about trust and more about guiding India toward US weapons and technology, turning economic pressure into diplomatic praise.

For India, this partnership may provide access to advanced technology and

opportunities for joint exercises. Still, it also means aligning more of its strategic choices with Washington’s priorities, thereby tightening the USA’s influence over India’s strategic options.

This is where the broader strategic picture comes into focus. The USA views China as a threat to its global influence, and a stronger, aligned India helps Washington maintain control over the Indo-Pacific region. By aligning New Delhi more closely with US defence and technology priorities, Washington gains a formidable partner to counter Beijing’s growing influence in the region. The deal exemplifies US tactics, pressuring partners when needed and revising agreements to serve its own interests, a pattern that has made trusting the USA quite risky, given its long history of unreliability, as evident from recent events like the Doha attack.

For India, the deal might offer a boost in arms production and access to advanced

technology, but it largely functions as a strategic leash in disguise. The benefits are carefully weighed to serve Washington, turning New Delhi into a convenient tool for the USA's ambitions in the Indo-Pacific. Instead of charting its own course, New Delhi risks becoming a supplier and enforcer for someone else's agenda.

The deal raises serious doubts not only about Washington's intentions but also about New Delhi's credibility as a regional player. The USA has a long history of making strategic promises that change whenever political priorities shift. South Asia has seen this before: in 1971, Washington assured that the Seventh Fleet's Task Force 74 would support Pakistan, a fleet that never arrived. Perhaps it sank somewhere in the Bermuda Triangle, along with many of Washington's forgotten promises.

But India's reliability is not much better. Its defence and foreign policy often shift

suddenly, and its record shows a pattern of backing away from commitments whenever domestic politics or strategic interests change. A clear example is New Delhi's quick withdrawal from the Regional Comprehensive Economic Partnership (RCEP) after negotiating with 15 countries, leaving partners unsure of India's consistency and long-term seriousness. This tendency to pull out at the last minute makes India a hard country to trust in major agreements. When both sides have such histories, it is hard to believe this defence pact is based on trust, stability, or long-term responsibility.

This mutual unreliability directly affects South Asia's strategic landscape. For India, heavy reliance on the USA may weaken the strategic autonomy it has long claimed to protect, while trying to bolster its defence sector with a partner known for changing course when it benefits its interests. For Pakistan, the deal introduces new security concerns as India acquires more advanced

capabilities, increasing pressure on Islamabad to adjust its own defence posture despite its tight financial situation. At the regional level, the agreement causes more harm than good.

With Washington's support, New Delhi may start acting more boldly and aggressively in South Asia, which only adds to the tension between the two nuclear-armed neighbors. Considering that India's military chief has described Operation Sindoor as just a "trailer," a trailer which almost triggered a nuclear war, it raises a serious question: if Washington continues to empower India, can the world remain safe from such an increasingly aggressive state? Instead of fostering peace, this shift can make the region more unpredictable and increase the risk of a serious mistake from either side.

Simultaneously, the deal grants India even more strategic space to act on its own terms, meaning that once its military strength grows, it may no longer be as

dependent on Washington as the USA expects. In trying to cultivate a loyal partner, the USA may instead be creating a monster in South Asia, more powerful, independent, and potentially hostile to its own creator. Ultimately, the pact is not about shared security but about two powers pursuing their own agendas, leaving South Asia to bear the consequences. And if history is any guide, when both partners lack credibility, the agreement itself is the first thing to be questioned.

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How the US-India Defence Pact is Fracturing BRICS *Barrira Gul*

In October 2025, the United States and India renewed their defence agreement for the next 10 years. The two sides view this pact as key to their broader regional and global interests, especially in the broadly perceived Indo-Pacific region, where Washington and New Delhi perceive China's growing influence as a challenge to their interests.

This increasing cooperation between the US and India is leading the BRICS towards internal disintegration, a crisis of identity, and a direct challenge to its unity and objectives.

The group was formed in 2009 to challenge the Western powers' dominance in international institutions, such as the World Bank and the Group of Seven (G7). The group has sought to reform the current global order and reduce dependence on the US dollar.

India is a member of BRICS and has simultaneously established a strategic partnership with the US, thereby fracturing the foundation of the group. Since the formation of their strategic partnership in the early twenty-first century, the US and India have signed several defense agreements.

India has emerged as one of the top importers of US military equipment in recent years. The two sides have signed four foundational agreements—LEMOA, COMCASA, ISA, and BECA— under which the US is providing India with support in logistics, intelligence sharing, and interoperability. This increased cooperation between Washington and New Delhi shows India's tilt towards the West.

However, the Indo-US deepening cooperation has direct implications for the internal dynamics of BRICS. India, on the one hand, is a staunch advocate of settling

bilateral trade within the BRICS in their local currencies. On the other hand, it is reluctant to support the de-dollarization narrative and replace the Dollar-dominated international system with Chinese currency.

BRICS includes close partners of the US, India, and the UAE. Also, China, the US's main strategic competitor, is complicating the group's internal dynamics. China and India, as members of the group, and India's reduced dependence on Russian oil due to high tariffs are challenging BRICS to find consensus on a range of critical issues.

On the one hand, increasing defense cooperation with the US and on the other, replacing the US-led world order shows India's guileful balancing approach. However, its engagement with the US also shows that India's strategic autonomy has faded away.

Ostensibly, the renewed pact shows that India's geopolitical ambitions lie with the US and Western partners, and its foreign policy failure to navigate between external

pressure, is weakening India's influence within BRICS.

Arguably, the new US and India defense pact may fail to counter unilateral tariffs discussed in the joint summit, making the BRICS Agenda weak. Washington's sanctions on Russian oil companies, including Lukoil and Rosneft, are moving India away from a Russian-centric approach towards a more U.S.-centric one.

Historically, Russia has been a primary supplier of military and defense equipment to India. However, reduction in reliance on Russian military hardware is gradually eroding mainly due to India's growing relationships with the US and its allies, such as Israel and France.

Furthermore, western sanctions on Russian oil following Russian invasion of Ukraine which have disrupted supply chains, and threats of further hiking tariff over continued purchase of discounted Russian oil, compels India to reduce its

imports, further deepening disintegration under the BRICS.

This reflects how external pressure reshapes strategic calculus, demonstrating Indian compromises on its strategic autonomy, which is no more sovereign in their decisions. Balancing revisionists among the BRICS while increasing American pressure on trade, security narratives, and reliance on advanced American technology illustrates India's struggle to balance BRICS and its defense pact with the US

The India-China strained relationships are another factor. Tensions are escalating within the BRICS forum as China and India are on the brink of a diplomatic standoff over several issues, including India's opposition to the Belt and Road Initiative (BRI), its longstanding border conflict in the Galwan region, and the intensifying competition for economic and geopolitical influence in the Global South.

In this context, a key objective of the US-India defense pact is to establish a balance

of power in the Indo-Pacific region against their mutual adversary, China. Additionally, this pact aims to prevent BRICS from developing into an anti-Western organization.

The US-India defense agreement aims to strengthen security dynamics in the Indo-Pacific while undermining the BRICS' capacity to serve as a counterbalance to the G7 on security matters and to shift BRICS from a Geopolitical to a more Geoeconomic platform.

Such engagements reduce India's alignment towards Russia and China and discourage it from pursuing any security or military alliance under BRICS, as a result, the BRICS platform is likely to be used for economic engagement and an alternate payments mechanism, rather than a security bloc or defense alliance against the G7, thereby deepening grievances among members.

In conclusion, Indian Foreign policy has seen a change from neutrality towards selective alignment, especially

after the US-India defense pact, which is significantly fracturing BRICS. President Donald Trump`s pressure for a trade war and weaponizing tariffs has brought India to align with the US, directly affecting the internal dynamics of BRICS.

However, it clearly questions India`s strategic autonomy, whether or not it is autonomous in its decisions. It clearly demonstrates a counterproductive measure of targeting the BRICS coalition.

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US National Security Strategy: A World Reoriented and South Asia

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The Trump administration released the US National Security Strategy (NSS) 2025, which outlined US strategic objectives, priority areas, strategies, and long-term policy orientation. For many of its European allies and partners, the NSS was a strategic shock because President Trump urged Europe to rethink its Security Architecture, including burden sharing within NATO. For US competitors such as Russia and China, there is a mixed view on the US strategic shift from the Euro-Atlantic to the Indo-Pacific. The document contains many ambiguities between America First and the national interests of others. But for South Asia, it is more than just a formal policy declaration; it holds greater significance for the region. South Asia needs to adapt to renewed strategic framework that recalibrates its strategy and maintains regional balance. The NSS did not discuss South Asia's strategic outlook

or the longstanding history of Conflicts between the two nuclear rivals but only mentioned the May Conflict. It assured that the Indo-Pacific once again remains at the heart of NSS and the core area of the US interests and called India a Strategic Partner of the US in Indo-Pacific.

NSS counts China as a threat to US economic and strategic interests in Indo-Pacific. And for that reason, the US will shift its strategic focus from the Euro-Atlantic to the Indo-Pacific, making Europe more responsible for its security to accommodate Russia. The US seeks to save time and resources to increase its presence and activities in Indo-Pacific. The document explicitly states that the US will compete in the Indo-Pacific region through alliances. The US plans to relocate its Weapons, technology, and logistical resources in the region to ensure that no actor controls or

restricts the Sea Lines of Communications (SLOCs) for a stable supply line and global trade. There is a stark contrast between the US expectations of non-interference from the world in the Western Hemisphere and its assertive plan for the Indo-Pacific. The South Asian region is an integral part of the Indian Ocean, a volatile region with a history of repeated wars, and home to two nuclear rivals sharing borders. The US plans to counter China by supporting India, and NSS ensures the US will expand its technology, weapons, and intelligence support to allies. The strategy ignores the region's internal security dynamics. The enhanced US support for India may raise the security anxiety in the region by disrupting the fragile strategic balance between.

NSS asserts on the militarization of the Indian Ocean and also hints at possible conflict in the region to protect the US interests. It also emphasized the creation of alliances in the Indo-Pacific, indicating how the QUAD, which was initially created for

economic and social cooperation, later evolved into a security-oriented partnership and became a geopolitical tool for the US in the region. Militarization of the Indian Ocean Region (IOR) will not happen in a vacuum, amid the region's complex dynamics and ongoing conflicts and tensions. The inadvertent or deliberate contestation between the US and China will have a significant impact on regional stability, particularly if India adopts an aggressive posture on behalf of the US to align with its strategic objectives. The South Asian region may become an inadvertent episode of US-China rivalry due to existing regional issues. Considering that India and Pakistan are the only nuclear rivals with direct military confrontations, Washington's extensive defence cooperation with India will amplify its sense of strategic superiority against its neighbours. This strategic imbalance will fuel New Delhi's dangerous confidence and will escalate the regional deterrence crisis.

The NSS repeatedly states the US conditional stance on intervening in disputes outside the Western Hemisphere. The US may intervene with full might if its interests are threatened, and the US will not exhaust its resources on matters outside the scope of its interests. Its support for India and the alliance restructuring is the prime example of how global power politics shape the regional geopolitical dynamics. South Asia seems to be a possible site of this great geopolitical contestation, where the US openly adopts an alliance-building stance and uses all means to maintain its hegemonic position. Regional actors may face a dilemma of choosing political blocs or improving their self-defence capabilities without becoming pawns between two great powers. Since the US looks to enhance strategic cooperation with India, the NSS does not hint at any collaboration with Pakistan in the near future. Policy makers in Islamabad need to reinterpret Pakistan's economic and strategic alignment in the broader region.

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PNRA's Role in Global Nuclear Governance

Harsa Kakar

Nuclear regulatory authorities worldwide have both domestic and international responsibilities for the safety of their nation to the hazards of nuclear materials and technology. ***PNRA's Role in Global Nuclear Governance***

Harsa Kakar In Pakistan, PNRA, as the national nuclear regulatory authority, has integrated the principles of international cooperation and safety into its regulatory framework and geopolitical stance, and, as such, serves as a model for safe and responsible nuclear actors in global nuclear governance.

PNRA has a wide-ranging mission that encompasses a comprehensive regulatory framework that governs nuclear safety, security, and radiological protection in Pakistan. PNRA's regulatory framework is founded on the most stringent international standards established by the International Atomic Energy Agency (IAEA), and PNRA

implements the IAEA's Safety Standards in accordance with the

Pakistan Nuclear Safety and Radiation Protection Ordinance.

PNRA's regulatory framework consists of a three-tiered system of ordinance, regulations, and regulatory guidelines, including Licensing requirements for nuclear facilities and the use of radioactive materials and ionizing radiation, inspections of licensees, enforcement of compliance with regulatory requirements, and monitoring of nuclear facilities and the activities of licensees. Additionally, PNRA performs detailed safety evaluations before and throughout the operational life cycle of nuclear facilities' design, construction, and operation. PNRA also uses probabilistic risk assessment methods, disaster preparedness and mitigation plans, human factor analysis, and environmental impact assessments to determine whether a

nuclear facility meets present sufficient safety standards .

To ensure the effectiveness of PNRA's regulatory efforts, PNRA has an independent inspection function and requires licensees to develop and implement appropriate internal safety management systems. Finally, PNRA employs a graded regulatory approach, where the degree of regulatory oversight will be commensurate with the level of risk associated with the regulated activity. Therefore PNRA will direct the majority of its resources to the areas of greatest risk.

In addition, PNRA has developed stringent emergency preparedness plans that include on-site response teams, regional emergency centers, and public alert systems that can rapidly respond to and mitigate potential radiological consequences of a nuclear accident. PNRA's regulatory oversight will continue and will be flexible and adaptive so that it can adapt to new technologies and lessons

learned from international nuclear accidents.

PNRA's contributions to regional and global safety

PNRA's regulatory framework addresses issues that span more than one country due to the transnational risks associated with nuclear activities. Therefore, through the application of regulatory standards, the likelihood of nuclear accidents with disastrous environmental and health impacts at the regional level is being minimized. Given that Pakistan shares borders with two neighboring nuclear states, i.e., China and India, PNRA needs to maintain high levels of regulatory oversight to foster bilateral confidence and alleviate concerns about the possibility of an unintended radiological release.

Additionally, PNRA's acceptance of the IAEA Conventions (the Convention on Nuclear Safety and the Convention on Early Notification of a Nuclear Accident) its commitment to international nuclear safety

obligations. These conventions provide Pakistan with a mechanism for sharing information and working with the global community in the event of a radiological emergency and for demonstrating accountability and a willingness to cooperate.

The geopolitical implications of PNRA's position on safety issues

PNRA's role extends beyond addressing safety issues in Pakistan and contributes to regional stability and the perception of Pakistan by the international community. As a region that has historically been characterized by long-standing rivalries and nuclear arms race, Pakistan's adherence to international nuclear safety standards is a confidence-building measure. By demonstrating a commitment to safety, PNRA is an established institute which also works to counter those weakening Pakistan's stance in global discussions on nuclear governance

PNRA's participation in global mechanisms for safety enhances Pakistan's reputation as a responsible nuclear state. It enables Pakistan to participate in the development of policies impacting the unstable security environment in South Asia. Effective nuclear regulation is a strategic contributor to Pakistan's broader foreign policy, improving . Support Pakistan's broader foreign policy, improving ties with countries that emphasize non-proliferation and nuclear safety (i.e., China), and supporting the development of Pakistan's nuclear infrastructure under the CPEC initiative. PNRA's credibility capacity-building projects with Pakistan to continue to improve Pakistan's safety practices.

Lessons from advanced states

PNRA could enhance its capabilities through the following examples:

One, the Finnish NRA today involves local communities in its safety measures and planning process specially the communities contiguous to such facilities.

PNRA, by following Finland's example, could involve local communities in the planning process, thereby enhancing public trust in nuclear safety and reducing the public's perception of mystery surrounding nuclear safety regulation.

Two, after the Fukushima disaster, Japan developed a new regulatory reform program to emphasize the expanded application of advanced probabilistic-risk assessment models to assess the risk of extreme natural disasters on nuclear reactors. Similarly, PNRA could begin to utilize more advanced risk-assessment models and mitigate the risks associated with Pakistan's geology and climate.

Three, as more and more nuclear reactor controls become reliant on digital control systems, the US NRC, for example, has developed a substantial body of regulations to ensure the protection of the digital control systems used at every US nuclear reactor facility. Thus, PNRA would be wise to similarly develop a body of regulations to

protect the digital control systems used at each and every Pakistani nuclear reactor facility.

Finally, several EU member-states have participated in numerous cross-border, simultaneous nuclear-emergency-preparedness exercises. Therefore, PNRA could also consider participating in similar exercises with both nuclear and non-nuclear states in the geographic area in which it operates to promote greater trust and cooperation among neighboring states in the case of a nuclear emergency.

Practical actions for PNRA to strengthen its position in global nuclear governance

By developing nuclear safety assurance and engaging with other nations, may further contribute to global nuclear governance, and by continuing to be committed to protecting the citizens and property of other nations, PNRA will not only enhance its ability to compete in an increasingly competitive world, but will assist in preventing potential damage to the

citizens and property of other nations due to nuclear accidents. The following are some specific ways PNRA can achieve this goal through practical action:

1. Develop and make available for use by the public a nuclear safety website which will allow the public to obtain current status reports and report incidents related to nuclear safety.
2. Invest in education and training opportunities abroad to teach personnel in the most recent technological advancements in nuclear safety and crisis management.
3. Expand its diplomatic efforts by spreading its message through international regulatory bodies on matters of nuclear safety.
4. To further strengthen its nuclear safety, Pakistan may also work with other regional organizations.

Considering the fact that PNRA is a well-established regulatory body and has been actively involved in global affairs regarding the regulations of nuclear facilities for peaceful purposes, and considering PNRA's history of being transparent, PNRA has now earned the distinction of being considered one of the most significant and credible components of the overall global nuclear safety structure of Pakistan. As a result of PNRA's proactive measures to assure nuclear safety outside of Pakistan's borders, PNRA decreases the likelihood of damage to people and property on a catastrophic scale and, at the same time, enhances its reputation internationally and contributes to the enhancement of Pakistan's credibility as a responsible nuclear power that addresses the larger issues of global nuclear governance.

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***2025 Global Security: Nuclear
Tensions, Rivalries, And
Emerging Military Threats***

Zafar Khan

The world in the year 2025 remains in flux and as complex as in previous years of the twenty-first century. The Russian–Ukrainian war is protracted. Europeans are more worried about their vital security and economic interests than ever before, despite some of them having the so-called nuclear umbrella within the NATO alliance. Although aspiring for a Nobel Peace Prize, the US under Donald Trump threatened Canada, Greenland, Venezuela, Mexico, and Panama.

The US, along with Israel, pre-empted Iranian nuclear facilities, attempting to obliterate its nuclear weapons programme. Today, there is much greater geopolitical and geostrategic pressure on Iran. Iran is being undermined and isolated. Many argue that its sphere of influence has been minimised. The chances for the proposed revival of the Joint Comprehensive Plan of

Action (JCPOA) remain slim. In South Asia, India has been aspiring to power projection, the escalation of dominance, and regional hegemony through its increasing conventional and nuclear forces. With dangerous strategic confidence and under the pretext of terrorism, it opted for preventive strikes against Pakistan—once in 2019 and again in May 2025—risking serious military escalation to a nuclear level.

This undermined the broader spirit of South Asian strategic stability. That being noted, Pakistan continues to produce effective countermeasures under the auspices of Full-Spectrum Deterrence, falling within the ambit of Credible Minimum Deterrence. It aims to maintain balance, reduce the acute security dilemma, minimise crisis instability, and keep its deterrent forces reliable, intact, and robust. Because of the

fear of escalation to a nuclear level in South Asia, the US, in the perceived multipolar world, may continue to play a significant role in preventing such an eventuality from occurring.

The academic debate over a unipolar, bipolar, or multipolar world prevails in leading, credible, research-oriented outlets in 2025. Many argue that it is a multipolar world, but in this multipolar system, the US continues to lead in economic and material resources, followed by China. However, others argue that, by all accounts, the US and China are the two great powers in the perceived multipolar world, while others in the system still lag; therefore, they contend that the world may be considered bipolar. The US continues to shake the foundations of its Asian and European allies for not doing enough, despite considering them among the pillars of its grand strategy. The US strategic relationship with its allies remains unpredictable. Many are now seriously considering their own security mechanisms rather than relying on US

security guarantees. One can imagine a Hobbesian world of all against all, trying to survive in the complex system of international relations, where no one is for anyone else, given the anarchic nature of the global system. The year 2025 has remained pessimistic.

It has seen all nuclear-weapon states modernising their conventional and nuclear force. Russia and the US are not on good terms, particularly when it comes to arms control agreements, following the departure from the Anti-Ballistic Missile (ABM) Treaty in 2002, the Intermediate-Range Nuclear Forces (INF) Treaty in 2019, and the suspension of the New START Treaty in 2023 the last of the Mohicans when it comes to any hope for arms control and possible future nuclear disarmament. The weakening future of the Comprehensive Nuclear-Test-Ban Treaty (CTBT), along with the continued existence of the longest-surviving non-proliferation treaty, the Non-Proliferation Treaty (NPT), with its loopholes and longstanding

discrimination between the haves and the have-nots, remains deeply troubling. The year 2025 has remained pessimistic.

It has seen all nuclear-weapon states modernising their conventional and nuclear forces. Russia and the US continue to possess 90 per cent of the world's total nuclear forces. Perhaps the US is spending far more on its deterrent forces than anyone else in the system. There is no evidence that nuclear disarmament is taking place anywhere in the world. Being threatened, others are aspiring to go nuclear as well. Since China's rise is widely perceived as a threat to US predominance in the competition among major powers, there is considerable pressure on China to reduce its deterrent forces. Many, including the Chinese White Paper 2025, argue that such an aspiration by the US may not be possible any time soon for two fundamental reasons: first, China may reach the level of the US; second, both the US and Russia should come down to the level of China

when it comes to the number of nuclear weapons supported by delivery systems.

The year 2025 continues to witness elements of fear, security dilemmas, competing rivalries, severe military crises, dangerous confidence in the use of preventive and pre-emptive strikes, and the integration of lethal emerging technologies into conventional and nuclear forces among competing powers. The assertive and offensive policies of major powers are affecting the policies of smaller powers in other regions. That is the state of nature in which all actors in the system live, relentlessly seeking power to dominate others. At the same time, others form alliances and bandwagon to survive another day.

Although difficult, the pathways are simple: competing actors need to aspire to commonalities and accommodation, avoid warfighting strategies, cooperate despite living in an acute security dilemma, urge one another towards more constructive

dialogue, and institutionalise robust and sustainable mechanisms for confidence-building measures, crisis management, and crisis resolution. Any failure to comply with such imperatives could make 2026 more volatile, offensive, and aggressive.

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