



**CASS Webinar Series**  
**“Nuclear South Asia: Challenges and Prospects”**  
**June 2, 2020**

**Introduction.** Centre for Aerospace and Security Studies (CASS) hosted a webinar titled “Nuclear South Asia: Challenges and Prospects” on June 2, 2020. The event was organized to review nuclear related developments in South Asia over the past two decades and understand the future trajectories. President CASS, Air Chief Marshal Kaleem Saadat (Retd) chaired the session. The panellists included Ambassador Zamir Akram (Retd), Advisor, Strategic Plans Division (SPD), Dr Adil Sultan, Director CASS, and Ms Sitara Noor, Senior Research Associate, CASS.

President CASS in his opening remarks provided the rationale of hosting the event, which was to commemorate the 22<sup>nd</sup> anniversary of the 1998 nuclear tests. He summarized the achievements and some of the lessons that should have been learnt by the strategic community in both India and Pakistan, since the nuclearization of the region over the past more than two decades. He welcomed the panellists and thanked more than 57 guest participants who participated in the webinar. Following is a summary of the proceedings.

**Amb Zamir Akram (Retd).** Ambassador Akram was requested to address three questions. How the nuclearization has helped in bringing stability or instability in South Asia? Are there any lessons from the Cold War nuclear competition between the two former superpowers that could be relevant for South Asia? What are the prospects of arms control and confidence building measures (CBMs) between the global powers and what impact it could have for South Asia?

Addressing the first question, Amb Akram said that the perennial problem for Pakistan since its inception had been to ensure its security against India that was not only powerful, but also

had territorial disputes, and which led Pakistan to follow more security-oriented policies. He was of the view that 1980's test from the Pakistani side resulted in a non-weaponized deterrence that helped prevent the outbreak of conventional conflicts, and the situation of a virtual deterrence had brought relative strategic stability in the region. The subsequent 1998 nuclear tests led to a weaponized deterrence that based on Mutual Assured Destruction (MAD), and which helped Pakistan to neutralize India's conventional superiority.

Consequently, strategic stability ensued that led to CBMs and the dialogue process between the two adversaries. Despite the win-win situation Indians were keen to reassert the salience of their conventional capabilities, which led to the introduction of new war fighting concepts such as the Cold Start Doctrine (CSD), forcing Pakistan to respond by evolving its own technological capabilities and introducing Full Spectrum Deterrence (FSD) posture. FSD was aimed to prevent the outbreak of war at the operational, tactical or strategic levels, and was never meant to prevent the outbreak of skirmishes along the Line of Control (LOC).

Amb Akram stated that our strategic community had outlined the conditions under which nuclear weapons use could be considered, which is, if there was a threat to Pakistan's security and sovereignty. Pakistan had also made it clear that it will not be an automatic use but a graduated use depending on the security environment. He noted that some Indians had made attempts to challenge Pakistan's FSD especially after the surgical strikes of last year, but they were sadly mistaken. Since India could not operationalize its Cold Start Doctrine, therefore, Pakistan did not resort to the FSD.

According to him, the Indians are trying to build up capabilities-both conventional and nuclear, and Pakistan, in response, needed to bring qualitative changes. He also laid emphasis on enhancing sea-based deterrent and developing space capabilities particularly the anti-satellite (ASAT) capabilities because future wars will be fought in the space. In response to a question, he stressed on the need for engagement and dialogue. However, he expressed his pessimism on the prospects of dialogue process under Modi regime. Responding to a question on the impact of S-400 missile on strategic balance and Pakistani response, he stressed that the induction of S-400 would have an impact, but it is likely to give a false sense of security as it would not provide a complete cover to entire Indian territory and could also be penetrated with Pakistan's improved cruise missiles.

**Dr Adil Sultan.** Dr Sultan focussed on three key areas: Why India and Pakistan acquired nuclear weapons; the role of nuclear weapons in Pakistan's security calculus; and the future trajectories. He began his talk by highlighting the nuclear drivers that led both India and Pakistan to build nuclear weapons, which are also reflected in their respective nuclear postures and doctrines. Dr Adil challenged the myth of nuclear triad involving China, and stated that if at all there is a nuclear competition between the three Asian nuclear powers, it could at best be explained as the two asymmetric dyads between India-China and India-Pakistan.

According to Dr Sultan India's motivation to acquire nuclear weapons was not based on threat from China but was largely driven by the prestige considerations. On the contrary, Pakistan's nuclear weapon pursuits have been mainly security driven - to restore the strategic balance that was destabilized by India. Addressing the role of nuclear weapons in Pakistan's security calculus he said that during the past crises nuclear weapons played important role in preventing war between the two countries. During the Balakot crises, the Indian side falsely propagated the narrative that since Pakistan did not resort to the use of nuclear weapons, its bluff has been called. On the contrary, there was no nuclear angle to this crisis. He added that the surgical strikes or the ongoing firing across LoC were not the type of events that should trigger a nuclear response. Pakistan has sufficient conventional responses to deal with these kinds of contingencies, as was proven during the 2019 Balakot crisis.

While highlighting the economic side of maintaining a credible nuclear deterrence he referred to the SIPRI and the International Campaign to Abolish Nuclear Weapons (ICAN) reports. According to the SIPRI report, there is a huge differential between India and Pakistan's conventional defense expenditures; and as per the ICAN report, Pakistan is spending half of what India is spending on the development and maintenance of its nuclear weapons but is able to reap more dividends.

Talking about the future trajectories and emerging thought in the Indian strategic enclave, he said that there was a possibility that India might review its No First Use (NFU) posture against Pakistan. Finally, he discarded the prevalent notion that Pakistan's Short-Range Ballistic Missiles (SRBMs) were for nuclear war fighting; whereas, these weapons were introduced to prevent even a limited war that could otherwise escalate to an all-out war between the two nuclear armed adversaries.

While addressing a question regarding Full Spectrum Deterrence (FSD) and surrounding misconceptions, Dr Adil said that FSD was introduced after India's Cold Start Doctrine, and was intended to convey the message that there was no space for conventional war between the two nuclear powers. Many people misinterpreted FSD as a possible shift from Credible Minimum Deterrence (CMD), which was not true. FSD was not a quantitative shift but a qualitative response to the emerging threats and remained within the ambit of CMD posture.

Responding to a question regarding Pakistan's response of Quid Pro Quo Plus, he said that this term was formally used recently by Gen Kidwai in one of his speeches. It was coined by CASS in a confidential study in January and was first used in a conference on 17 April, 2019. In simple terms it would mean that Pakistan's response will come with a premium; whatever India will do Pakistan's response will be a notch higher. Addressing the NSG politics, he stated that Pakistan had always maintained that the non-NPT states should be made part of the NSG on a non-discriminatory and objective criterion which would also help the global non-proliferation regime.

**Ms Sitara Noor.** Ms Sitara Noor's talk focused on the development of Pakistan's peaceful nuclear programme, Pakistan's nuclear safety and security regime followed by an assessment of the Nuclear Suppliers Group (NSG) debate on granting membership to India and Pakistan and the Confidence Building Measures (CBMs) process between India and Pakistan. She started by sharing a brief history of Pakistan's nuclear development and noted that unlike its eastern neighbour, Pakistan's nuclear programme was initiated with a focus on peaceful aspects only. She shared that Pakistan had developed long-standing professionalism in this area and enjoyed strong credentials with respect to the International Atomic Energy Agency (IAEA) safeguards implementation at its facilities, the presence of a robust regulatory mechanism and a commitment to pursuing and expanding its civilian program. Pakistan Atomic Energy Commission (PAEC) was pursuing research and development in diverse areas such as basic and applied sciences food, agriculture and biotechnology, human health energy and industry. She highlighted that there were currently 5 operational civilian nuclear power plants, producing 1430 MWt (5.7% of total energy generation) to expand to 40,000 MW as envisaged in National Nuclear Energy Vision 2050. Additionally, Pakistan was using the nuclear application for the achievement of 9 of the 17 Sustainable Development Goals (SDGs) with the support of the IAEA. She added that 18 nuclear medical centres were treating one

million patients annually under the Pakistan Atomic Energy Commission and two more were under construction.

Talking about the nuclear safety and security regime in Pakistan, she highlighted that Pakistan had made tremendous developments in that area that needed more attention. Pakistan's nuclear safety and security systems under an independent regulatory authority were up to the international standards and had gained much appreciation worldwide. She explained the legislative and institutional structure, systems and international obligations in this regard.

Ms Noor briefly shared insights on the NSG debate and stressed that Pakistan should continue its diplomatic efforts and lobbying for a criteria-based approach for the NSG membership. On nuclear CBMs she emphasized that the CBMs were means towards an end and gave an overview of various nuclear CBMs between Pakistan and India. She highlighted that Pakistan had put a list of nuclear safety and security related CBMs on the table, that had seen no reciprocity from India. She ended her discussion by giving some policy options that mainly focused on more information sharing on Pakistan's civilian nuclear programme, continuous up-gradation of its safety and security regime in conjunction with the IAEA programmes and enhancing diplomatic efforts for NSG membership.

In response to a question on nuclear safety review and upgrades in Pakistan after Fukushima nuclear accident, she informed the audience that PAEC conducted a safety review of all nuclear power plants post-Fukushima and made necessary upgrades, as suggested by the IAEA. She added that new power plants K-2 & K-3 were being built in Karachi were Generation-III type, which had inbuilt passive safety measures.

**Concluding Remarks by President CASS.** President CASS thanked the three speakers and appreciated them for succinctly covering all the questions shared at the beginning of the session. He recapped some of the main points shared by the speakers. Commenting on Ambassador Zamir Akram's remarks, he reiterated his statement on the role of FSD and stressed that it was not meant to prevent small skirmishes like Balakot. The nuclear threshold would only be determined after careful deliberation of all pros and cons, and there was no automatic threshold. He noted India's conventional buildup as an ongoing process. On current stalemate between India and Pakistan, President CASS stressed that Pakistan should not beg for talks. He commented on Pakistan's ambivalent approach in its external relations especially hedging policy between China and the US. He appreciated Dr Adil's explanation of the

different driving factors behind the acquisition of nuclear weapons by India and Pakistan. While India was after prestige, Pakistan only wanted to defend itself. He highlighted that many Indian actions are for media consumption and had no significance otherwise. In this regard, he stressed the importance and significance of media warfare in the next crisis. He acknowledged Ms Sitara for providing a different perspective and shedding light on Pakistani achievement in the civilian nuclear domain, such as health, energy, agriculture and industry. He shared his perspective on the debate surrounding the efficacy of S-400 systems and stated that notwithstanding the hype, it was not a magic weapon and had its own limitations; there were always some gaps as well as the countermeasures such as the stealth technology. He termed it as the “march of technology” which came with antidotes for all inventions over time. He also commented on the limitation of artificial intelligence and stated that it did not have a magic bullet to do all the jobs at once, in comparison to the human mind that was versatile and could do multi-tasking. He further commented on the fallacy of NFU pledge by any state especially India, which he believed would not honor its NFU commitment vis-à-vis Pakistan.

President CASS stated that the security situation would have been more precarious for Pakistan, had it not acquired nuclear weapons. With respect to the NSG debate, he noted that the world powers always had a discriminatory approach. There was a muted reaction to Indian atrocities in Indian occupied Kashmir due to economic and other considerations. He noted the resumption of a new arms race as many treaties were being abandoned. Additionally, space was being militarized as the US had already created a space force. He noted the dichotomy of countries wishing to live in peace yet preparing for war. In his judgement, the world was passing through the most unstable period since world war II because most powerful countries were abandoning the rule-based order. He stressed that there were attempts to disrupt the Chinese rise in the South China Sea as well as the BRI project. He saw this as a challenge as well as an opportunity for Pakistan but warned that due to political infighting, we would not be able to grab the opportunities with full alacrity. He noted that there were frenetic activities by the adversaries but there was no sign of matching urgency to respond to those challenges. He urged that we needed to fight back at the information front especially to counter malicious Indian propaganda.

## Key Takeaways

1. Strategic stability remains largely dependent on India's actions. Pakistan has no choice but to restore the strategic balance by taking appropriate measures.
2. Pakistan needs to develop capabilities, especially the sea-based deterrent and ASAT capabilities that could help neutralize India's quantitative advantage without getting into an arms competition.
3. Pakistan needs to gear up its diplomatic efforts so that its voice against India's offensive posturing and destabilizing measures can be heard by the international community more effectively.
4. Smart investments in nuclear deterrence can bring more dividends and lessen pressures to gain conventional parity.
5. Efforts should be made to bring more clarity in Pakistan's doctrinal developments, especially the new constructs such as the FSD posture.
6. Pakistan's achievements in the civilian nuclear sector and its legitimate demand to be accommodated in the NSG should be highlighted at various international forums and during our bilateral engagements with other countries.
7. In the "march of technology," each invention will be followed by an antidote. Every technological development in security domain would have its own limitations and gaps that could be covered by countermeasures, leading to an endless technological race.