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South Asian Nuclear History

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Strategic Vision Institute (SVI) organized a webinar on "South Asian Nuclear History" on 26th April 2021. The webinar was chaired by Dr. Zafar Iqbal Cheema (President/ Executive Director, SVI). The speakers included Dr. Rabia Akhtar (Director School of Integrated Social Sciences, University of Lahore), Dr. Adil Sultan (Acting Dean/Chair, FASSS, Air University Islamabad), Dr. Zafar Khan (Professor of International Relations, BUITEMS, Quetta/ Executive Director of Baluchistan Think Tank Network, BTTN, Quetta), and Dr. Tughral Yamin (Associate Dean CIPS, NUST, Islamabad)

The major takeaways from the webinar are: after India's 1974 nuclear explosion Pakistan was compelled to acquire nuclear weapons capability because of existential threat from India. Pakistan's rationale for acquiring nuclear weapons capability is based on geostrategic and security compulsions. In order to understand South Asian nuclear history, there is a need for a deeper study of Indian nuclear diplomacy; that has kept it shielded from international safeguards and also makes it an active player in the global politics of proliferation. Furthermore, the US while being the key international player and the proponent of non-proliferation deliberately designed its policies to create an imbalance in the South Asian region and prevent Pakistan from acquiring nuclear capability when the latter was left with no choice. However, Pakistan had refused to give in to any pressure on Pakistan's nuclear weapons program. India's quest for big power status is driving its candidature for Nuclear Suppliers Group (NSG), a cartel of 48 countries that dominate the global nuclear trade. India through NSG membership wants to get the prestige of being equated with other nuclear-weapon states. If India succeeds in getting NSG membership it would enjoy more privileges than the nuclear-weapon states, which are signatories of the NPT. They are obligated to work for disarmament and if India is allowed into NSG it wouldn't have any such obligation since NSG is not a legally binding group or a multilateral arms control treaty. India is already enjoying access to high-end nuclear technologies because of its civil nuclear deal with the US and the 2008 waiver by the NSG. Therefore, the benefits of membership of the NSG for India would mostly be political as it would then be seen as a "responsible country" with a "legitimate nuclear weapons state" status. On the other hand, Pakistan, if not given NSG membership alongside India, would then technically be the only country possessing nuclear technology that would be ineligible for nuclear trade with the NSG countries. Just like Israel, another non-NPT country, which already enjoys a special status backed by the US it could get whatever it wants.

From Pakistan's point of view, security remains a dominant factor vis-à-vis South Asian nuclear history which is somehow identical to Cold War nuclear history and rivalry between the US and Soviet Union.

Dr. Zafar Iqbal Cheema formally inaugurated the session with a warm welcome to the participants and expressed his gratitude for their attendance. He started his remarks by elaborating that there are three distinct perspectives on the South Asian nuclear history: Western, Indian, and Pakistani perspectives. West primarily looks at South Asia as a proliferation case; India was the first to proliferate and Pakistan subsequently joined in. The West doesn't look into whether India's desire to acquiring nuclear weapon capability was legitimate and whether it was security-driven or compelled by the need for power politics. Contrary to this, given the security dynamics of the region, Pakistan was compelled to follow suit after almost 25 years. However, both the states have been lumped together as a proliferation case. The change in global politics of proliferation has only occurred recently since India and the U signed the Indo-US nuclear deal in 2005 and became strategic partners. Therefore, the US' criticism is not neutral and the emphasis is now on Pakistan for various reasons. The second perspective; the Indian perspective is a power politics perspective. According to this perspective India has had great power aspirations since the time of independence. In this regard, Nehru's statements just before the independence and throughout the 50s and 60s' are quite evident of this very fact. He had highlighted that India is going to be a great power. The subsequent Indian professionals like K. Subramaniam; a key Indian strategist, was of the view that nuclear weapons are a currency of International Power. In the '50s, India was following a nuclear weapons program in which the military option was built on the pretext of peaceful uses of the nuclear program. Then eventually, with Homi J. Bhabha as the technological father of the Indian nuclear program, India embarked on a unique strategy of acquiring nuclear weapon capability within its nuclear program from a technological perspective. India has kept it outside the international safeguards by adopting unique nuclear diplomacy that needs to be studied. Likewise, Pakistan's perspective is based on the geostrategic and security

compulsions. After India's 1974 nuclear explosion Pakistan was compelled to acquire nuclear weapons capability based on an existential threat from India.

The first speaker Dr. Rabia Akhtar reflected her insight on "History and Evolution of Nuclear Program and Policy in South Asia: Western Perspective." She started by saying that the US turned a blind eye to both Pakistan and Indian nuclear developments during the 1970s, 1980s, and 1990s but the non-proliferation policy specific to Pakistan especially concerning country-specific sanctions was punitive exclusively for Pakistan. While explaining how US non-proliferation policy took shape towards India and Pakistan differently she stated that the prologue of Pakistan-US relations that was inherited by the Ford administration in 1974 was written in 1965 when the US placed India and Pakistan under arms embargo after both countries violated the terms of US-supplied military assistance program equipment during their war of 1965. Three months before Ford took office, India had conducted its first nuclear explosive test on May 18, 1974, by separating plutonium from the spent fuel from its Canadian-supplied nuclear reactor CIRUS for which heavy water was supplied by the US. The Indian nuclear test which was dubbed as Peaceful Nuclear Explosion (PNE) was criticized worldwide for violating the integrity of bilateral nuclear agreements with Canada and the US also highlighted the dangers of nuclear proliferation in a world where many countries have signed similar multilateral agreements for their nuclear facilities to pursue peaceful nuclear energy programs. Pakistan also joined other countries in criticizing India for its decision but India's nuclear test hardly came as a surprise for Pakistan's government or scientific community. Even though the test was conducted during Ford's Vice Presidency in the Nixon administration, the Indian nuclear test single-handedly defined the contours of Ford's non-proliferation policy towards Pakistan during his Presidency. The reason is that the Indian nuclear test in 1974 had a direct bearing on Pakistan's national security given their bitter history since partition which became a point of reference for Pakistan to seek resumption of US military supply back to counter the Indian threat.

She further stated that there are four measures that Pakistan undertook to deal with the altered strategic dynamic in South Asia after the Indian nuclear test. Number one; Pakistan

decided to maintain nuclear ambiguity while seeking conventional military arms from the US to modernize its military to counter the Indian conventional and nuclear threat. Second, Pakistan decided to seek nuclear guarantees from major powers. Third, Pakistan decided to stay out of the non-proliferation treaty while internationalizing the issues of both regional nuclear proliferation and disarmament by voicing against the presence of nuclear weapons in the region. And finally, Pakistan decided to acquire civilian nuclear technology from various international suppliers to meet its energy requirements and to develop its nuclear infrastructure. So, during the early 70s, the Ford administration's non-proliferation policy towards Pakistan was taking shape and it rested on the following three factors: the resumption of military supplies to Pakistan; second, the administration's attempts to persuade Pakistan to cancel the French reprocessing plant agreement; and third, the origins and rationales of Symington Amendment sanctions with which Pakistan was slapped in 1979. Pakistan's narrative about the denial of access to nuclear technology to meet its genuine energy needs finds its genesis in the 1970s; it was marked by the US tolerance for India's proliferation behavior post-1974, India's breach of international agreements after its nuclear testing in 1974 and the discriminant nature of US non-proliferation legislation towards Pakistan such as Symington Amendment. So, for the US, there was enough suspicion about Pakistan and its motivation to expand its nuclear program - the civilian part of it at that time.

The US administration was skeptical of Pakistan's intentions to acquire fuel cycle capabilities even after Bhutto's public assurances and his willingness to place all current and future facilities under the IAEA safeguards. The reasons for the US' skepticism were multiple; first, Pakistan's nuclear energy program during the mid-70s did not justify the high cost of US $1 billion for the reprocessing plant that the GOP wanted to construct and operate indigenously. Second, Pakistan's consistent opposition to the NPT was suspicious since it was genuinely interested in the expansion of its civilian nuclear energy program; it had much to gain from the international nuclear suppliers' countries as an NPT state party rather than as a non-NPT state. Third, plutonium reprocessing plants would have given Pakistan not only expertise on the back end of the fuel cycle but also the incentives to reprocess the spent fuel from its only operational reactor at that time - the KANUPP reactor in Karachi which utilizes natural uranium fuel. Hence

based on these apprehensions and sensing latent proliferation potential in the perspective of the Franco-Pak plutonium reprocessing plant deal, the Ford administration established a quid pro quo with Pakistan. This was the first-ever time that the US established a quid pro quo. USG wanted sanctions on the sale of advanced A-7 attack aircraft, 110 of which Pakistan was interested in buying from the US if Pakistan gave up the option of acquiring a French nuclear reprocessing plant. On the US objection to Pakistan's lack of economic justification to pursue the acquisition of nuclear fuel and heavy water facilities, Sahabzada Yaqub Khan who was Pakistan's Ambassador to the US at the time argued that since Pakistan lacked fossil fuels, it had to depend on nuclear energy to meet its future power needs. Given that it would have taken Pakistan four years to complete its reprocessing plant Sahabzada Yaqub Khan maintained that the delay in the approval of the IAEA safeguards agreement would delay the completion of the plant eventually delaying Pakistan's ability to become self-sufficient in meeting its energy needs.

The trilateral safeguards agreement between Pakistan, France, and the IAEA was signed on 18th March 1976 with the vote of the US delegate on board. Kissinger advised Ford at that time on direct intervention to stop Bhutto from progressing with the reprocessing project. In 1976 Bhutto wrote a letter to Ford and he expressed his regret that the administration was pursuing double non-proliferation standards where it admonished Pakistan for its genuine peaceful nuclear intentions and rewarded India with the uninterrupted nuclear fuel supply even after its nuclear testing. The US did not selectively pressure Pakistan into canceling the deal, it also approached France for the same and as a nuclear weapon state France proved to be a more challenging case for US nuclear diplomacy in the mid-70s than Germany for its nuclear export policies. The US was finding it increasingly difficult to engage France in a nuclear supplier agreement after the test in 1974 which would have triggered nuclear technology exports in countries that were not part of the NPT. While the US was pressuring the French to cancel their agreement with Pakistan, it had processed a shipment of twenty thousand pounds of enriched uranium to India for use in American built Tarapur Nuclear Power plant. The US administration at that time took shelter behind the contracts signed in the past between India and the US even after India breached trust. The French decision to finally cancel the nuclear reprocessing agreement came in 1978. Pakistan was under the Symington sanctions when the Soviet Union

entered Afghanistan in December 1979. The US turned to Pakistan to deal with its Soviet problem. It was a deadlock on the nature of US security and economic assistance to Pakistan which continued throughout the year till the time two leaders met in person for the first time. The session between Carter and Zia was recorded as warm and friendly. During that meeting Zia did not raise the subject of a security treaty that Pakistan had been wanting from the US to secure itself from the dual Indo-Soviet threat that it faced at that time. The two leaders also did not discuss Pakistan's nuclear issue. 1980 was also the year that tested Carter's non-proliferation credentials to supply uranium fuel for the Indian nuclear reactors at Tarapur and it generated quite a lot of controversy. Despite significant domestic support for withholding the fuel shipments to India, the Carter administration announced its decision to send a shipment of enriched uranium to India on May 8th, 1980. This US decision was disturbing for the domestic and international audience especially since it came after the Indian Prime Minister Indira Gandhi's announcement on March 14, 1980, of conducting more nuclear tests in the future if it served Indian national interest. Carter signed the executive order in 1980 to authorize Tarapur exports stating the need for bolstering ties with the South Asian nations that could play a role in checking Soviet expansionism ignoring the fact that India was actively pursuing defence and security cooperation with the Soviet Union even after it had invaded Afghanistan in 1979. This was the fact that disturbed Pakistan to no end.

Pakistan at that time maintained that India violated the terms of 1963 Indo-US nuclear cooperation and used US-supplied heavy water in its 1974 test. Furthermore, its refusal to place all its nuclear facilities under full-scope safeguards would allow India to produce nuclear weapons in the future which was a grave security concern for Pakistan especially when the resolve to conduct further nuclear tests was publicly announced, the US turned a blind eye to that as well. The take-home for Pakistan was that nuclear non-proliferation was a flexible item on Carter's foreign policy. Pakistan benefited the most from the blind eye during the strategic engagement with the US under the two Reagan administrations. With its eight-year-long engagement which resulted in Soviet withdrawal from Afghanistan and the subsequent breakup of the Soviet Union bringing an end to Pakistan as a threshold nuclear-weapon state, emerged as a clear winner. Reagan certified thrice based on GOP assurances that Pakistan was pursuing a peaceful nuclear

program even when there was overwhelming evidence that Pakistan was pursuing nuclear weapons development. The Pressler amendment was passed by the US Congress in 1985 and it became the first-ever country-specific non-proliferation sanction against any country and that country was Pakistan. However, the government of Pakistan was cool about it when it was passed. There could be two reasons for the GOP's calmness at that time, one, Pakistan's overconfidence that the US needed Pakistan more than Pakistan needed the US at the time the amendment was passed; second, Pakistan's successful test in 1983 and 1984 provided Pakistan with the confidence that it had already achieved the capability, therefore, sanctions would not be too damaging if they did come. October 1st, 1990, is etched in the memory of many Pakistanis as the date on which the US showed its true colors and parted ways with its one-time ally Pakistan but more than that it was the time when the US slammed Pakistan with the Pressler sanctions. In the absence of President Bush making certification in determination on Pakistan's lack of possession of nuclear weapons, the amendment automatically went into effect on October 1st, 1990. But again, it was not a surprise for Pakistan at least not for the GOP because it had been fully warned. For the Pressler law to take effect the final assembly of a nuclear explosive device was not a requirement to meet the Pressler amendment definition of possession of a nuclear device. So further for Pakistan to escape the Pressler sanctions, Pakistan needed not to possess even one highly enriched uranium core. The Sharif government at that time had inherited the Pressler sanctions and their consequences, the biggest being the issue of continued payments and subsequent release of the F-16s that were held. The Bush administration attempted to find a way to give those to Pakistan but the congressional odds at that time were against them. Among the foreign policy challenges that Clinton inherited from the Bush administration, Pakistan's continuing advances in nuclear weapons development, Pak-China nuclear technology cooperation, and Indo-Pak tensions over Kashmir dictated his South Asia foreign policy and his non-proliferation agenda. At the beginning of his term, Clinton sees out his non-proliferation agenda to achieve the CTBT by 1996 and also to achieve a global consensus on FMCT.

Though the international community welcomed his initiatives, South Asia with India and Pakistan its two nuclear threshold states, posed challenges for the administration. Clinton's eight years in office corresponded with Pakistan's final march towards overt nuclear capability. India,

and in response Pakistan, tested their nuclear weapons in May 1998 triggering the Symington sanctions against both countries. Perhaps the only time Pakistan was satisfied with equitable non-proliferation justice by any US administration. Both Benazir Bhutto and Nawaz Sharif refused to give in to any pressure on Pakistan's nuclear weapons program.

Lastly, it appears that all the non-proliferation policies by each administration Ford, Carter, Reagan, Bush, and Clinton was designed to create an imbalance in favor of Pakistan not going nuclear yet it ended up achieving just the opposite.

The second speaker Dr. Adil Sultan presented his views on "Evolution of Indian Nuclear Program and its Nuclear Diplomacy: Historiographic Perspective." Dr. Sultan discussed how the Indian nuclear program evolved over the last many decades, how India tried to extend to the international community by claiming that its nuclear program was developed because of the Chinese threat perception, but it is not at all like that.

He discussed two main aspects of the Indian Nuclear program. First, the Indian nuclear program was driven by the prestige factor, and it was the primary consideration; though many Indian nuclear scholars do not agree with that and continue to state that security was the main consideration. But Dr. Sultan maintained that this was not the case. He also deliberated on the importance of these models to explain the main proliferation drivers of many states. He furthermore discussed Indian nuclear diplomacy which has been used by India to project itself as a responsible nuclear country by creating an option to develop a nuclear weapons program.

He started with the explanation of Scott D. Sagan's model which deliberates on the drivers of the acquisition of nuclear weapons. According to this model, states proliferate because of three primary considerations: (i) Security (ii) Domestic model (iii) Prestige / Norm model. There isn't necessarily one model which drives the nuclear proliferation of a particular state. But here could be the combination of two models as well, which Scott Sagan terms as multi-causality. States acquire norm models because they want to be at par with other major powers and want to be seen as a great power. Security, as the name suggests, refers to when states feel insecure from the existential threat or the external threat and build the capability to ward off those

threats. The third is the domestic politics model, which entails that stakeholders or strategic enclaves. This also includes the civilian and military bureaucracy, scientific establishment, political leadership, and all those actors that play their role in the country's development of a nuclear program.

In view of this model, he analyzed India's nuclear program. India started its nuclear program just after 1947 when it started to pursue its dual-track program. After Hiroshima and Nagasaki, Nehru had the vision to emerge as a great power in the future, so the nuclear capability was the one that could give an advantage to India, and hence India pursued the nuclear weapon option at that time under the then Prime minister Nehru. In 1959, Homi Bhabba gave a statement that India has the potential to build a bomb within a few months if the political leadership permits. Whether India had the potential or not at that time, the statement entails a serious intent of the Indian enclave to pursue a nuclear weapon program. Careful observation of the Indian nuclear program reveals that China-India relations were very cordial during that period, so China was not at all a threat at the time, in fact, 'Hindi-Cheeni Bhai Bhai' type of slogan was there, so China was never an existential threat that could trigger the nuclear thinking among India's leadership to pursue the nuclear weapon program. Furthermore, in 1962, there was a border conflict, not a war. That was a military crisis between India and China. So if India was on a track to pursue a nuclear weapon program, the 1962 crisis with China did not create any urgency for India's decision-makers, as is evident from the Indian political leadership in the parliament at that time. Nonetheless, a debate generated after 1962 that India should build a capability but there was no serious focus on building a nuclear weapon program. Thus, if China was a major consideration, this crisis could have expedited India's nuclear program back then. In 1964 when China conducted a nuclear test, there was a debate in India's parliament, but there appeared no sense of urgency to quickly build a nuclear weapon program.

India continued to build a nuclear program and in 1974, India tested the first device, which is termed a peaceful nuclear explosion. But India could not justify how it perceived an existential threat or alleged threat from China to term the test as a peaceful nuclear explosion. The idea of peaceful nuclear explosion came from the US, according to some writings, as the US wanted India

to acquire this capability but also wanted it to avoid the sanctions by the United States which could have been imposed on India if it was declared a nuclear weapon test. So this term probably was suggested by the US policymakers to India to escape those sanctions and declare the test as a peaceful nuclear explosion. But subsequently, Indian scientists who were involved in1974 nuclear test have also written that there was nothing peaceful about 1974 instead it was a weapon test. So, India conducted the first weapon test in 1974. There was also an element of domestic politics in this test. Indira Gandhi was under crisis. There was unrest in India and Gandhi wanted to establish her credentials as a nationalist leader. Probably the 1974 test was used to build nuclear nationalism in India and it prevails to date as well.

Considering the 1974 test, it shows how peaceful nuclear technology was misused to develop nuclear weapon tests and how India projected to the international community that it is not building weapons. However, the fact was that India was using that technology and the international existing regime in support of building its nuclear capability.

Fast-forward to the 1990s, it is generally believed that the credit of the nuclear test 1998 goes to the BJP government because of their nationalist agenda. But in 1996, Narasimha Rao who was not in BJP also attempted to test but the US got that information from the satellite imagery and reverted India from testing a nuclear device in 1996. So, the intent was always there to declare India as a nuclear weapon state but there was no credible justification to be given by India to the international community. 1996 was also significant because of the ongoing debate on CTBT. President Clinton wanted to finalize the treaty and India was looking at this window of opportunity. India wanted to become a nuclear weapon state before the CTBT came into force, as afterward the options would be closed. In 1996, I.K. Gujral also gave the famous statement that Indians have a third eye, there are two ways to get into the international Security Council, one is economic development and the other is the nuclear weapon spark. Hence, economic development was a long process and nuclear weapons are a shortcut. This also reflects on Indian thinking that it evidently wanted to build nuclear capability and get a seat at the United Nations Security Council.

According to the statement by India's Ambassador to Conference on Disarmament (CD) Ms. Savitri Kunadi "the acquisition of nuclear weapons was the right of one-sixth of humanity." Such statements were prevalent along with talks of the Hindu Bomb and the right of the Hindu civilization. These sentiments were imparted into Indian thinking by the BJP election manifesto. The aim was to spread the message to the public and to international community that the Hindu Bomb has come and India should be recognized as a nuclear weapon state, as this was their right and the right of Hindu civilization. Post-1998, there were some sanctions, but interestingly during the same period, India and the US were having the bilateral dialogue on how to inculcate India into a mainstream nonproliferation regime. In 2004, this culminated into the Next Step in Strategic Partnership which had several elements that included cooperation in nuclear space and other strategic and dual-use technology. This also went on with the July 18th, 2005 statement which is considered as the India-US strategic partnership. One of the important components of the India-US strategic partnership was the India-US Nuclear deal.

Considering the major drivers of India's nuclear weapon development, prestige was the main factor. During this time the US domestic politics also started to play a significant role in vertical proliferation and security, most specifically considering China as the major threat is a more recent phenomenon, but that could not be denied, as India grows in its size, definitely it might have seen China as a major adversary. So, as India's power potential evolves, its security concerns could also change in the future, but the major driver was prestige.

While deliberating on Indian nuclear diplomacy he maintained that India was one of those countries that led to NPT negotiations and were part of the eighteen-nation disarmament committee. It forced the US along with the other countries to agree to the quick grand bargain in which non-nuclear-weapon states would not pursue nuclear weapons and nuclear-weapon states would commit that they would disarm. India was spared in that campaign and this was agreed upon once NPT was open for signature, India refused to call it nuclear apartheid. Likewise, on the issue of CTBT, India has spearheaded the discussions and negotiations, but once CTBT was open for signature, India refused to sign. Similarly, with regard to the FMCT, India was the co-sponsor of the resolution of the fissile material treaty, once the resolution came its stance was

that the existing stock should not be included. Finally, on the export control regime, the whole debate of India's membership of NSG is also driven by its consideration to be acquainted with other major powers to be recognized as a nuclear weapon state, outside the NPT norms, because according to article IX of the NPT, India, Pakistan, and Israel cannot be seen as nuclear-weapon states. Dr. Sultan reiterated that the point of de facto-de jure was only for the interpretation of the NPT, otherwise, legally India, Pakistan, and Israel are nuclear-weapon states because they have never violated any treaty that they have signed.

He further highlighted the NSG debate and stated that India got the exemption in 2008. India wants to become a member of NSG just because it will give India prestige that could equate it with the other nuclear-weapon states. In fact, India would have more privileges as compared to the nuclear-weapon states who have signed the NPT because the NPT nuclear-weapon states have stated under article VI of NPT that they have an obligation to work in good faith towards nuclear disarmament. India on the other hand is being incorporated into the mainstream, without signing the NPT. So India will have all the privileges of nuclear weapon states without having any obligation or commitment to work towards disarmament. Thus, the whole debate is also driven by its consideration for prestige, as it wants to be equated with other nuclear-weapon states. While concluding his talk, Dr. Sultan said that if the genesis or the proliferation drivers or the motivations of India are to be analyzed, they were primarily the prestige factor. Likewise, the Indian nuclear diplomacy that is also guided by prestige factor or norm consideration was based on the notion that India wants to be seen at par with other nuclear-weapon states.

The third speaker Dr. Zafar Khan deliberated upon "Pakistan's Perspective on the South Asian Nuclear History." Some of the questions he addressed were: Why does history in general and nuclear history in particular matter? What can be the key implications of nuclear history for South Asian nuclear rivals? How might we learn from such a robust nuclear history comprising many nuclear-weapon states? What lessons we might learn from nuclear history amid evolving nuclear posture, force modernization, and emerging technologies and their implications on nuclear policies?

It is important to note that things change over a certain span of time and such changes would then become an essential part of history – that is, what happens today will become part of history depending much on how we treat such changes for our conceptual understanding of the given issue. Many IR theories, more importantly Realism, the leading and the predominant theory, largely depends on credible, enriched, historical, and empirical evidence. Therefore, history remains an important part of the stronger theoretical explanation for understanding better what is going on in the present and conceptualizing more accurately what may or may not happen in the future.

South Asian nuclear history has always been significantly reactive to the evolving strategic environment – that is, how one state's strategic posturing affects the strategic posturing of its potential adversary. In other words, it can be observed how the South Asian policy posturing is affected by the major nuclear powers. For example, as the cycle goes on, the US was the first country to develop and use its nuclear weapons. This was out of the fear that its potential adversary Germany during WWII could develop and use these deadly weapons against the US and its allies. Then the Soviet Union was under tremendous fear and pressure and developed its nuclear weapons rather quite quickly. The UK, France, and China followed suit by developing nuclear weapons. Since India and China have been strategic rivals for many decades and we know that they had a short war in 1962, India started to build its nuclear weapons in reaction to China becoming an established nuclear-weapon state in 1964. Of course, Pakistan followed suit India's nuclear weapon tests purely for security reasons. North Korea because of its security threat perception developed and tested its nuclear weapons, while Israel has already developed but never tested its nuclear weapons to potentially prevent yet another holocaust.

The point is that South Asian nuclear history teaches us that in addition to many other factors, security remains the predominant factor for states acquiring nuclear weapons. One of the major implications we may learn from a broader nuclear history is that nuclear weapons speak volumes for deterring potential adversaries. This entails that nuclear weapons remain the ultimate guarantor for peace and stability if these weapons are credible, reliable, and secured enough for many nuclear weapon states including that of the South Asian nuclear rivals. Just

imagine if there were no nuclear weapons between the potential nuclear adversaries, how the world would look like with the so-called conventional deterrence. One of John Mearsheimer's key books on "Conventional Deterrence" reminds us how badly conventional deterrence absent from nuclear deterrence failed in recent history.

The South Asian nuclear history is predominantly affected and influenced by the Cold War nuclear history. Therefore, as part of implications, the South Asian nuclear history and its analysis contain many essential concepts that originated in the Cold War nuclear history when both the Soviet Union and the US developed various combinations of strategic posturing on why, how, and when to use nuclear weapons. The effects of the development of these weapons for security and deterrence purposes have also been remarkably interesting. Despite several serious military and nuclear crises, both the Soviet Union and the US did not wage a major direct military war because of the fear of escalation to a nuclear war. South Asian nuclear rivals also have not fought direct major wars since the arrival of nuclear weapons, although both India and Pakistan have confronted a number of serious crises. South Asian nuclear history learns from the Cold War nuclear history that nuclear weapons are not the panacea to all the issues, but these weapons have to deter volume which ultimately matters for the state's security.

When it comes to learning lessons from nuclear history, one of the key learning caveats can be that South Asian nuclear weapons have revolutionized the relationship between the South Asia nuclear rivals. That said, even though South Asian nuclear rivals have confronted several serious crises and they do not talk formally and directly to each other, nuclear weapons have prevented both sides to wage bigger wars any longer because of the fear of escalation to an unthinkable that neither side would want to happen in the first place. The recent South Asian nuclear history teaches South Asian nuclear rivals that there might not be a nuclear victory particularly when both sides possess credible nuclear weapons. Even though nuclear weapons bolstered with modernized conventional forces might provide incentives for a preemptive strike, escalation dominance, and nuclear sabre rattling, South Asian nuclear rivals may not even afford to wage a limited war because such could also spiral out of control, perhaps, letting the South

Asian rational leadership say what once the European leaders stated after the WWI started: "Alas! If we only knew it."

Yet, there still can be other important lessons we learned from the South Asian nuclear history: a) nuclear weapons would stay as long as nuclear weapons exist in the world, b) nuclear weapons are and should always be used for deterrence purposes by preventing major wars, c) credible nuclear deterrence diminishes the concept of smaller and bigger states. For example, a smaller state while possessing credible nuclear weapons and their delivery systems can potentially deter a much larger nuclear adversary, and d) although nuclear disarmament may not simply be possible for a variety of reasons, nuclear arms control can, to produce a period of relaxation, encourage deterrence stability, and prevent the risk of military escalations between nuclear rivals.

In addition to key implications and learning caveats out of South Asian nuclear history, it is also imperative to note few plausible thoughts on how nuclear history teaches us the arrival of emerging technologies and the implications of such technologies on nuclear force posturing. Emerging technologies matter. Many scholars in the existing literature reflect that those who lag in terms of acquiring new technologies could suffer much both in the shorter and longer terms. Many nuclear weapon states may soon be able to achieve capacity for acquiring and developing emerging technologies potentially undermining the broader strategic stability in terms of potential risks of dangerous escalations, crises, and a new pattern of the arms race in a new era of evolving technologies. To this end, the inclusion of Cold War technologies such as CANOPY WING, Espionage and Signals Intelligence (SIGINT), Intelligence, Surveillance, and Reconnaissance (ISR) and more recently focusing much more on the new technologies such as speed potentially bolstered by hypersonic glide vehicles, Hyper-spectral Imaging (HSI) and Artificial Intelligence (AI) (for identifying fixed facilities and probably nuclear missile sites if the two are combined and used together), sensors such as the Unattended Ground Sensors (UGS), Tagging, Tracking, and Locating (TTL), SIGINT (Signals Intelligence), Automated Target Recognition (ATR), and Ground Moving Target Indicator (GMTI) particularly for locating and targeting the mobile missiles, the Unmanned Aerial Vehicles (drones), cyber, electronic warfare

capabilities, etc., all these emerging and or disruptive technologies reflect that nothing can substantially be hidden in the new era of technology. Therefore, states while possessing sophisticated technologies may make others vulnerable to preemptive strikes. Arguably, students of nuclear history may not miss how these emerging technologies in the changing realm of nuclear strategy may have the benefits and risks for nuclear weapon states in the twenty-first century of nuclear politics. I think that South Asian nuclear historians will be much more interested to observe the arrival and effects of emerging technologies on the South Asian deterrent force posturing.

To sum up, the South Asian nuclear history can teach us a lot of things with regard to deterrence capability, capacity, better communication, force posturing, and indeed the new era of emerging technologies that every nuclear-weapon state for that matter would desire to do for multiple key objectives: 1) power projection, 2) escalation dominance, 3) an edge against the potential adversary, 4) confidence and incentive for preemptive strikes whenever and however these countries would like, 5) saber-rattling for containment and deterrence purposes, and 6) making a new history from the existing history. Also, while learning from the Cold War nuclear history, perhaps the South Asian nuclear history could probably provide a learning statement – that is, the production of a strategic restraint regime for initiating some type of arms control mechanism applicable to the South Asian strategic environment, managing serious conflicts, potentially preventing accidental nuclear wars, stopping bigger arms race, and more importantly promoting strategic stability in South Asia.

The last speaker, Dr. Tughral Yamin spoke on "Current Trends in Global Politics of Non-Proliferation: A South Asian Perspective." He started by saying that as far as nuclear non-proliferation in South Asia is concerned, it has reached a certain point and stopped and there is no more debate over it. Both India and Pakistan have nuclear weapons, and no one can snatch those weapons unless any state decides to willfully forego them. Given the current circumstances, if there have to be deliberations on non-proliferation, it should be the non-

proliferation of COVID-19. In this particular matter, it seems that both India and Pakistan are willing to collaborate; they might be willing to collaborate on other matters as well.

Non-proliferation cannot be limited to South Asia only since it's a broad canvas that covers other countries as well. There are various dynamics of non-proliferation strategies. These include different diplomatic means which could be bilateral treaties (SALT, START, etc.).It is important to note that there is no arms reduction treaty between India and Pakistan. At the multilateral level, the cornerstone of the non-proliferation regime is the NPT, but for that matter, Pakistan holds a very principled stance that unless India does not sign it, Pakistan won't sign either. The same goes for the CTBT, FMCT, and others as well. In addition to these, non-proliferation strategies include political and economic sanctions, which are primarily based on diplomatic and economic sanctions for instance the Pressler Amendment against Pakistan and various others as well. These also intend towards diplomatic isolation of that specific state, like for instance after Cold War Pakistan was deliberately sidelined and pushed into a corner by the US. This caused severe difficulties for Pakistan to re-integrate with the international community. In this regard, threats and coercion are being used by the US; the way Henry A Kissinger threatened the then Prime Minister of Pakistan with statements like: "the US will make a horrible example out of you." So, it includes both direct and indirect threats and various other tactics that are meant to threaten a specific country. But these tactics become irrelevant once a specific country acquires a nuclear weapon. There are Kinetic means as well, which involve the use of force to destroy the nuclear capability of a specific state. This has been done against Iraq and to some extent Syria which resulted in the signing of the Chemical Weapons Convention by Syria. Since the future will involve the use of technology for instance cyber threats and other emerging technologies, the non-proliferation strategies would be more dependent on technology in the future.

There are three stages of current trends in the global politics of Non-proliferation. The first age of non-proliferation during the Cold War was based on a set of various multilateral treaties such as the NPT, CTBT, and FMCT which ultimately gripped all the countries. However, the core principle was there are only big-5 countries (P-5) that are authorized to have nuclear

weapons and the rest of the countries were not supposed to acquire them, simple is that. During the second age of Non-proliferation; in the post-Cold War era, the US helped the former Soviet Republics to destroy their nuclear weapons and in turn provided them with huge financial incentives. Further, various groups like the NSG that formed during the Cold War became more relevant. The third age of Non-proliferation is based on aggressive, coercive, and often kinetic Non-proliferation measures and even technology. So, these were the three eras of non-proliferation strategies, and South Asia was not spared.

Talking about the kinetic and coercive non-proliferation strategies, he deliberated that three case studies are quite significant: Iraq, Syria, and Libya. What happened in Iraq in 2003 was totally based on fictitious intelligence to disarm and destroy a country. There were speculations that Iraq has weapons which if used could destroy Israel in just 45 minutes. That was totally a false intelligence report since there are now various declassified reports of the US that have revealed this fact. The main incentive for the US to destroy Iraq was none other than to occupy the oil reserves there. The same goes for Syria, it was reported that Syria has chemical weapons; the strategy was based on it to give up its chemical weapons through the threat of missile attack back in 2013. The third country in this regard is Libya; first, the west encouraged the Libyan government to give up on its nascent nuclear program and then, later on, destroyed the country and then brutally killed Mr. Gaddafi.

Now the Iranian Model has become more significant; political engagement through JCPOA resulted in an increase of break-out time by 10-15 years and then later on Mr. Trump unilaterally withdrew from the agreement and again imposed sanctions on Iran. There has been a considerable increase in cyber-attacks against Iran for instance cyberattacks through Stuxnet and unexplained attacks at the Natanz facility. The third tactic being used against Iran is the assassinations of its military commanders like Gen. Qasim Solaimani and nuclear scientists like Mohsen Fakhrizadeh very recently. So, these are various tactics being used to stop Iran's nuclear program and there is a clear lesson for other countries as well.

The North Korean Model is also important; initially, it was based on negotiations that resulted in an agreed upon framework of which various countries were part. But later on, it did

not work. So, North Korea decided to withdraw from the NPT, since the resultant security was not suitable for its broader security interest. Currently, what is happening in the Korean Peninsula is all about war games and drills to threaten. South Korea, Japan, and the US all are involved in this to threaten North Korea. As a reaction, North Korea demonstrates its missile capability. This is the model which is dominating the region but this becomes irrelevant since North Korea has already acquired nuclear capability and also China is supporting it. These were some of the dynamics and current trends in the global politics of non-proliferation that needed to be deliberated upon.

Observations/Question & Answers Session:

Ms. Saba Hanif (Research Scholar, NDU) asked a question to Dr. Adil Sultan: what will be the implications for Pakistan if India joins NSG, how complex the situation will become for Pakistan as NSG entry decisions are binding? Dr. Adil Sultan responded by saying that the NSG is not a legal regime; it is an informal arrangement. The countries which participate have political obligations on whatever decisions are made; they are made on consensus. So if India is made a permanent member of the NSG it would legitimize India's status as a nuclear weapon state outside the NPT. Under the NSG exemption of 2008, India is already qualified for nuclear trade and dual sensitive technologies with the rest of the NSG members. There is going to be a political benefit to India since it would be seen as a responsible country brought into the mainstream non-proliferation regime and its status as a nuclear weapon state would be given legitimacy. For Pakistan, probably, it would emerge as the only country technically ineligible for the nuclear trade with the NSG countries apart from Israel. Regarding NSG decisions, he said yes the NSG does make decisions on consensus but these decisions are not binding because NSG after all is not a legal regime. So, any of the NSG members can trade with any non-NSG country, but generally, they remain reluctant and that is the technical and political implication.

Amb. (R) Fauzia Nasreen (Advisor COMSATS Secretariat, Islamabad) raised a question: what will be the future of NPT given the dominant role of disruptive technologies. Dr. Zafar Khan while answering this question said that NPT though is one of the longest multilateral treaties having more than 190 states as parties; is a weak treaty because there are a lot of issues

ingrained. For instance, it recognizes only 5 states as the nuclear-weapon states (between haves and have-nots) and that's the biggest issue. The rest of the countries under the NPT are not recognized as nuclear-weapon states. The other point is that they will one day have to opt for nuclear disarmament, but that is not happening. Even though there are a lot of other treaties that still exist, in any case, the existence of the NPT is very important since it has contained what John F. Kennedy once predicted that there will be more than two dozen nuclear-weapon states. Regarding emerging technologies, the existence of NPT is very important as in the future it will be looking into these disruptive technologies to have some sort of a controlled regime on disruptive technologies. So, the future is there for the NPT; it is to bring all the amendments and changes into it.

Dr. Tariq Rauf (Former Alternate Head of IAEA NPT Delegation, Austria) posed a question to Dr. Rabia Akhtar: how would you compare the US blind eye towards India-Pakistan with that towards Israel's nuclear program from the 1960s to date? Dr. Rabia made a deliberate assertion from a Realism point of view that "Israel doesn't have a bomb." Since in all realistic purposes, this question would not fall in any court of law but the list of nations that have sold nuclear technology to Israel including both the materials and expertise to make nuclear weapons, collectively have turned a blind eye to the theft itself. Ironically, these countries are among the strongest supporters of non-proliferation today. It is not just one country, it is the US, France, Germany, Britain, and Norway. She urged that everyone must read the article that came out in *The Guardian*; "The Truths about Israel's Secret Nuclear Arsenal" and many others. For instance, Wilson Center has a huge cache of declassified materials which does point to Israel's possession of nuclear weapons. All this can be rationalized in a way that there is organized hypocrisy that surrounds the entire debate about non-proliferation and the so-called leaders of the nuclear non-proliferation regime are the ones who are the gatekeepers. If today they want to sanction Israel for its nuclear proliferation behavior, all the facts would be out here. As long as this organized hypocrisy remains, we would not see Israel being condemned for the possession of nuclear weapons and that is the irony that those who point fingers towards Pakistan for example India are the ones who are gatekeeping all the mechanisms.

Dr. Tariq Rauf made a brief statement; if one remembers the meeting between President L.B. Johnson and Israel Foreign Minister Golda Meir; they had already reached a secret understanding that the US would turn a firm blind eye towards Israel. During the Kennedy administration when the US sent inspectors to Dimona, they also conveniently turned a blind eye and the Israeli's sat them around in circles when they visited Dimona. So, it's a very well-known secret what Israel has and all the countries that provided material technology and expertise to Israel's nuclear program and that have been very correctly outlined at all international forums, for instance, IAEA and the NPT whenever the discussion turns to Israel mainly by the Arab states is very quickly shut down and there is a very strong tendency to focus on the proliferation challenges of today like Iran and North Korea and unfortunately, Pakistan is also lumped into that category. Israel is still very much protected and it is also big hypocrisy that Israel has been attacking Iranian nuclear facilities. In addition, they have assassinated five nuclear scientists in Iran over the past seven years that one can categorize as 'state terrorism.

Mr. Syed Ali Zia Jaffery (Research Associate, CSSPR, University of Lahore) asked a question to Dr. Zafar Khan: in his 1975 classic "Escalation and Nuclear Option," Dr. Bernard Brodie suggested not to link small border violations with deterrence failures, on what basis do you think that deterrence, both conventional and nuclear, have failed recently? While responding to this question, Dr. Zafar Khan said that we see the conventional deterrence has failed in the recent past and there are a lot of examples. One of the books by John Mearsheimer on conventional deterrence mentions that there are a lot of cases on conventional deterrence that have failed; perhaps one or two have luckily worked out but the rest of the episodes of the conventional deterrence have pretty much failed. On the nuclear deterrence, he maintained that it has not failed yet even though there are several crises during the Cold War of which declassified evidence is there. Nuclear deterrence has faced a lot of challenges and crises over time but luckily has not failed as yet; it has prevented major crises and wars particularly between the nuclear-weapon states. So, it has got significance, it probably would have that significance in the future as well. Even though there will be new and emergent technologies acquired, nuclear deterrence would have its significance and standing in the realm of international nuclear politics.

The next question came from Mr. Haris Bilal Malik (Research Associate, SVI) that was directed towards Dr. Tughral Yamin. He asked that given the current discriminatory political and diplomatic trends of the global non-proliferation regime what could be Pakistan's future course of action. Dr. Yamin responded that Pakistan's future course of action seems to be quite clear. It may not sign the NPT until India signs, the same goes for the CTBT. For FMCT, Pakistan holds that there should not be an exemption to India's existing fissile material stock. As far as South Asia is concerned, stances are very hard and rigid; everyone knows what to do and what not to do. The only difference in South Asia is that both India and Pakistan have nuclear weapons; Pakistan's existing policies in this regard won't change in the future. Even, no one can bound Pakistan since it has the nuclear capability that would likely act as a credible deterrent. What happened with Libya, Iran and North Korea was only possible since these countries did not possess nuclear weapons at that time. Even now since North Korea has already acquired the capability, now nothing can be done against it. Regarding Pakistan, one must be rest assured that it has nuclear weapons and credible deterrence and that is why its stance is very clear-cut. Important thing is that Pakistan must never compromise on the safety and security of its nuclear weapons and installations while taking into consideration the emergent technologies.

Mr. Farukh Ansar (Student, QAU) asked a question to Dr. Zafar Khan: what are the prospects of India-Pakistan deterrence stability in the backdrop of India's persistent doctrinal maneuvering, military technological advancements, and preemptive strategies to launch a limited military offensive like Balakot? While responding to this question Dr. Khan said that we have experienced all these crises since the arrival of nuclear weapons capabilities in the 1980s and until Pakistan acquired this capability in response to India's nuclear tests, India would have all these imperative because of the new technologies that India is acquiring from countries like the US, France, and Israel. It would have the incentive to go for escalation dominance and preemptive strikes against Pakistan and perhaps China as well under the notions of a two-front war. But one thing is to be kept in mind that India is far away from becoming as capable as the US and the Soviet Union were. It has got its limitations and it has yet to develop that capacity to wage two-front war against two nuclear weapons states i.e. Pakistan and China. So, India should be very much clear not to go for such a mistake and approach towards waging even the limited

war against Pakistan because that would lead to the fear of escalation to a bigger level which perhaps nobody wants.

Mr. Adeel Kazmi (GM, Administration, Foundation University Islamabad) asked a question: since in South Asia there are divergent views on nuclear history and perspectives on deterrence and the way it has functioned in various crises until Pulwama 2019, in this acrimonious backdrop do we have any hope to see these two nuclear rivals entering into serious bilateral agreements on further nuclear non-proliferation and fruitful stopping the trap of arms race in the region? Dr. Akhtar while responding to this question said that when arms control was happening between the US and Russia, they moved in that direction and achieved certain parity at the strategic level, numbers and types of delivery vehicles which led to arms control framework and new types of mechanisms to come into place so that they stop at that number that they already had. With India and Pakistan, we do not have that kind of parity; and until and unless that parity is achieved an arms control framework between India and Pakistan cannot be foreseen to come into place. India is continuously modernizing its nuclear program and claims that it is because of China. Whereas, China seems to be not in the number game but in the case of modernizing its arsenal and delivery means and getting to more disruptive technologies, and inducting them in its program because of the US. So, as long as we have this strategic chain this is unidirectional, arms control happening cannot be seen. Nevertheless, Pakistan maintains that it is not an arms race with India and it just wants to maintain the credibility of its deterrence. Dr. Sultan added that he also sees India-Pakistan and India- China as two asymmetric tides that have emerged more recently. In addition to that, the India-US strategic partnership and the way India has been projected vis-à-vis its role in the Asia-Pacific has become more dismissive, and it has no incentive to engage with Pakistan. Because the major powers, especially the US, want India to emerge as a rival to China, so unless there is a commonality of interests it is not likely to be any arms control arrangement between the two countries.

Ms. Tayabba Nisar Khan (News Anchor PTV World) asked a question to Dr. Rabia Akhtar: as the US extended preferential treatment to India especially under the Carter administration before the 123 Agreement where India was accepted as a budding regional power and relaxed the sanctions, how did it affect Pakistan at that time? Dr. Akhtar responded that with respect to

India, it had an agreement with the US which was signed in 1963 and according to that US had agreed to supply low enriched uranium fuel for the Indian nuclear reactors and the life of that agreement was for 30 years which was the life of the reactor itself. So, the agreement required India to maintain safeguards on the US-supplied fuels; it did not undertake re-processing without the US consent and did not use enriched uranium for nuclear explosives. Even though India conducted a peaceful nuclear explosion in 1974, it was still considered a non-nuclear-weapon state according to the NPT. This is what Pakistan had an issue with and that is what the controversy with the Carter administration was.

In the end, Dr. Zafar Iqbal Cheema (President/Executive Director, SVI) thanked all the panelists for their excellent presentations and for making their distinguished contributions. He also thanked the participants, who joined the webinar and raised very significant questions.

Media Coverage:

The Coverage of the SVI webinar was reported in print and electronic media. The event was streamed live on social media. The recording is also available on the SVI official YouTube Channel and the SVI website.

Print Media:

1. Nation

https://nation.com.pk/28-Apr-2021/india-s-desire-for-nsg-berth-based-on-its-hegemony-speakers

2. Dawn

https://www.dawn.com/news/1620701/indias-quest-for-power-status-reason-behind-candidature-for-nsg-experts

Electronic Media:

PTV World News

https://www.facebook.com/watch/?v=732114450803453

Social Media:

1. YouTube

https://www.youtube.com/watch?v=-2-EKcCZzTU

2. Facebook

https://www.facebook.com/svicom/videos/479738593306617/