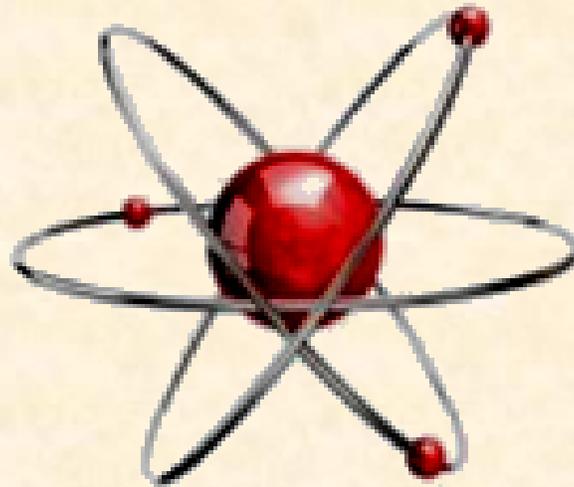


*Three Day Capacity Building Workshop*

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NUCLEAR NON-PROLIFERATION:  
CHALLENGES AND PROSPECTS

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## **Nuclear Non-Proliferation: Challenges and Prospects**

Despite an almost universal adherence to the NPT, the Nuclear Non-Proliferation Regime continues to face multiple challenges. The gradual addition of nuclear weapon states beyond the P-5, e.g., India, Israel, Pakistan and more recently North Korea is not only by itself considered a very serious challenge but raises the specter of further rise of nuclear weapon states. This specter in turn creates hurdles in the development and transfer of nuclear technology for 'even' exclusively peaceful purposes and undermines the objectives of the Article IV of the NPT. The NNWS (Non-Nuclear Weapons States), despite their continued and sincere adherence to the NPT, are not only complainant about non-realization of the aims of article IV but also feel disappointed on the failures in the field of nuclear disarmament as visualized in the article VI of the NPT.

The discriminatory and preferential practices by NWS members of the NPT, e.g., the India-U.S. nuclear deal and India's NSG exemption undermine the aims of the NPT and Non-proliferation. It has raised a lot of questions about the discriminatory practices by the NWS to use the NSG as an instrument of their foreign and economic policies that has seriously undermined the credibility of NSG and development of nuclear technology for peaceful purposes. The exceptionally favorable consideration of the FMCT in the CD at the expense of other important strategic issues like negative security guarantees, PAROS, and nuclear disarmament indicates strategic and foreign policy priorities of the NWS great powers rather than promotion of nuclear non-proliferation.

A host of other challenges are being grappled within the Nuclear Security Summit's (NSS) agenda. The safety of nuclear materials, facilities, and nuclear terrorism are some of the challenges being prioritized at the NSS fora. NSS meeting at Washington D.C., Seoul, and more recently at Hague focused on protection of nuclear materials, (Convention on Physical Protection of Nuclear Material (CPPNM), nuclear terrorism in the form of Global Initiative to Combat Nuclear Terrorism (GICNT), and Nuclear Security and Safety. However, the NPT and Non-Proliferation Regime are considered not only an enviable success that needs to be further consolidated and its inadequacies to be addressed for positive prospects that are believed to exist.

Keeping in mind the current scenario on the subject of Nuclear Non-Proliferation, SVI (Strategic Vision Institute) organized three day seminar-cum-workshop titled “Nuclear Non-Proliferation: Challenges and Prospects” to analyze the current issues in the field of Disarmament, Arms Control and Non-proliferation for mid-career civil and military officers, young academicians and journalists.

In his welcome remarks, Chairman of Strategic Vision Institute, Mr. Ross Masood Hussain, acknowledged the important contributions of the SVI to the current debates on contemporary issues through its previous successful conferences, roundtables and publications in the short span of time since its inception in January 2013. He stated that the SVI has come a long way and the credit for its achievements goes to the President of SVI, Dr. Zafar Iqbal Cheema. Mr. Hussain cordially welcomed the audience to the conference and thanked them for their valuable participation in the SVI events.



Dr. Zafar Iqbal Cheema, President / Executive Director SVI, gave a brief introduction to the SVI. He told that the rationale of SVI originates from the imperative of cultivating adequate professional expertise to cope with the growingly complex strategic environment for policy formulation and decision-making process in all fields of national and international politics. He said that the SVI serves as a ‘Debating Forum’ for diverse perspectives. He added that, SVI intends to project strategic foresights on issues of national and international importance through dispassionate, impartial, and independent research, analyses, and studies. The primary focus of the SVI is to provide a framework of professional expertise, doctrinal wisdom and foresight that is indispensable for discreet formulation and successful management of politico-economic, diplomatic, and military dimensions of state policies. He also welcomed the participants to the Workshop and thanked the audience for their active presence in the workshop.



## DAY 1: PEACEFUL USES OF NUCLEAR TECHNOLOGY

Mr. Rizwan Sharif, Lecturer at Fatima Jinnah Women University (FJWU), while speaking at the workshop, elaborated that how the nuclear technology can play a significant role in different areas of human life. He highlighted the role of nuclear technology in electric power generation, agriculture, health sector etc. Furthermore, he argued that nuclear technology is inextricably intertwined in our daily lives in the modern age. Use of nuclear technology in routine human life necessitates awareness about its safe use and improved security measures to avoid any accident or misuse of the technology. The scope of peaceful use of nuclear technology can be widened to serve mankind in a much better way, he suggested.



Air Cdre (R) Ghulam Mujadid presented his views on “**Prospects and Pitfalls of Nuclear Power Generation**”. He enlightened the audience by providing technical information



on the subject and discussed that how the nuclear technology can be used to generate electricity. After discussing various pros and cons of nuclear power generation, he recommended that Pakistan must explore options of nuclear powered desalination plants, industrial heating and maritime propulsion. In the end he gave a brief set of information about use of nuclear technology other than power generation.

Mr. Ghulam Rasool Athar, Director, Applied Systems Analysis Division, Pakistan Atomic Energy Commission, presented his views on the “*Nuclear Power Generation and Pakistan’s Energy Crisis*”, and enlightened the audience on electricity generation and consumption, economic development, and other plausible options for power generation like solar, wind, geo-thermal, and biomass etc. He suggested that there are various options available for electricity generation in the country. Each option has its potential as well as limitations. All options should be explored to meet the increasing demand of electricity but there must be nuclear power plants to meet the base-load requirements. For a sustainable development of



electricity system, the base-load management must be comprised of such options which are reliable, economically cheap, and environment friendly.

## DAY 2: NON-PROLIFERATION REGIME: PROBLEMS AND PROSPECTS

Dr. Zafar Khan, Assistant Professor, Department of Strategic and Nuclear Studies, FCS, National Defense University, Islamabad, presented his views on the “*NPT: Issues, Challenges and Prospects*”. He shed light on the Non-Proliferation Regimes, the challenges they face, their future prospects, and the role of NWS (nuclear weapon states) in strengthening non-proliferation efforts. He suggested that the major nuclear weapon states undertook some concrete and serious initiatives at top trajectory level which could provide incentives for smaller nuclear weapon states and NNWS to be on board. Non-proliferation regime without the effective role of major powers is like the “emperor with no cloths”.



Air Cdre Dr. Adil Sultan, Director Arms Control & Disarmament Affairs (ACDA), Strategic Plans Division (SPD), while speaking on the topic “*Politics of NSG and India Specific IAEA Safeguards*”,\_enlightened the audience on the export control cartel, e.g. NSG and its country specific exemptions. He emphasized on the contemporary NSG debate regarding its membership criteria and its unjustified waivers. He emphasized that membership of NSG should be criteria-based, which should have universal application. He argued that NSG can achieve its objectives only by adopting criteria-based approach following equal treatment for all the state around the globe.



Dr. Shahid Bukhari, from The Islamia University of Bahawalpur, presented his views on the “*Pakistan and Non-proliferation Regimes*”. He elaborated that Pakistan has been a staunch supporter of Arms control and Disarmament efforts. Pakistan proposed many arms control measures in the region as well as offered cooperation to international endeavors, he stated. He also recommended that International community must understand the growing energy crises, economic challenges, regional political developments as well as the



security compulsions of Pakistan. A stable prosperous Pakistan is necessary for promoting peace and stability around the world. It does not need to misuse the nuclear technology provided for civilian purposes.



### **DAY 3: NUCLEAR SAFETY AND SECURITY**

Ambassador (R) Tariq Osman Hyder spoke on “**Nuclear CBMs Between Pakistan and India and their Relevance to Strategic Stability in South Asia**”. He outlined the nuclear CBMs put in place since 1998, e.g., Agreement on Non Attack on Nuclear Facilities etc. The



Chair of the session, Air Commodore (R) Khalid Banuri noted that Ambassador Hyder had led Pakistan’s delegations in negotiations of the 2005 Agreement on Pre-Notification of Flight Testing of Ballistic Missiles and 2007 Agreement on Reducing the Risk from Accidents Relating to Nuclear Weapons. The hotline between the two Foreign Secretaries had also been initiated and the hotline between the two DGMOs, which had been established in 1987, was upgraded to a uniform digital transmission system throughout.

Ambassador Hyder emphasized that Nuclear CBMs were organically linked to Conventional Military CBMs, and part of civil and military CBMs between the two countries dating back to 1947. Therefore, they reflected the nature of bilateral relationship. he added that the end objective of such nuclear and conventional CBMs was to improve relations leading to

more substantial CBMs that could help to mitigate tensions between the two countries. He noticed that India, since 2007, due to the US-India nuclear deal and strategic partnership with the USA supported by its Western allies, had been reluctant to consider the long-standing CBMs proposals by Pakistan, such as for a Strategic Restraint Regime in South Asia. Discussing the NSG membership criteria, Ambassador claimed that Pakistan's case for membership is stronger than that of India, if a criteria based approach is adopted rather than adopting an approach that rests on political consideration of exceptionalism. Highlighting the discriminatory policies of non-proliferation regimes, he added that India-US nuclear deal is one of the exceptions. He noted that leaving the eight Indian power reactors and its ambitious breeder reactors program outside the safeguards has made it capable of producing a vast quantity of nuclear weapons annually. He emphasized that all power generation reactors of Pakistan are under the IAEA safeguards and it further intends to keep all newly installed civilian reactors under the safeguards in future. He urged that this aspect should be fully projected and highlighted in front of NSG member states as well as to the international community. He noted that India's membership to NSG prior to Pakistan should not be acceptable to Pakistan in any case. He added that the international criticism against Pakistan-China civilian nuclear cooperation is unjust because Pakistan-China cooperation is under complete safeguards and is completely consistent with the legal obligations on both countries.

Air Cdre (r) Khalid Iqbal, while speaking on “**Nuclear Terrorism**”, explained that risk of nuclear terrorism prevails in the whole world but Pakistan is managing its nuclear assets in an effective manner, which has reduced the risk of nuclear terrorism in Pakistan in comparison with the measures taken by rest of the world. Discussing Pakistan's perspective on nuclear terrorism, he emphasized that the focus should be on synergy and coordination among various components of the nuclear security architecture.



Ambassador(R) Ali Sarwar Naqvi, spoke on “**Nuclear Safety and Security: A case study of Pakistan**”. He argued that the evolution of nuclear safety and security regime in Pakistan shows that the country is not standing still on what it has achieved in the field of safeguarding its assets and capabilities. He added that there is a constant process of reviewing the

all aspects of controls with a view to improving them continually. Pakistan's case study shows that it fulfills all the requirements for nuclear safety and security a responsible nuclear weapon state. He noted that it has better nuclear safety measures for its civilian nuclear installations as well in comparison with many others in the world.



### **VOTE OF THANKS BY DR. ZAFAR IQBAL CHEEMA**

After all the presentations by the learned speakers and interactive question/answer sessions, Dr. Zafar Iqbal Cheema profoundly thanked the entire august audience present in the house and said that their presence has made the workshop a successful endeavor. He paid special thanks to the participants and expressed his appreciation to all the honorable speakers who presented their views and enlightened the audience with their expertise on the subject. He extended his gratitude towards research and secretarial staff of the SVI for the hard work put into successfully conducting this two day seminar. He also greatly admired and appreciated the help of other associations, publishers, printers, media, photographer and volunteers.