



CSS EVENT REPORT

BOOK TALK ON “INDIA’S NUCLEAR TITANS: A BIOGRAPHICAL FRAMEWORK”

By: Dr. Soumya Awasthi and Dr. Shrabana Barua

The Centre for Security Studies (CSS) conducted a book talk on 4th March 2024 and invited Dr. Soumya Awasthi and Dr. Shrabana Barua, editors of “India’s Nuclear Titans: A Biographical Framework”, to talk about India's nuclear program which represents a confluence of scientific innovation, strategic acumen, and resolute political will. Coinciding with the 25th anniversary of India's nuclear test program, notably the Pokhran-II tests or Operation Shakti, this publication marks a significant milestone, offering an in-depth exploration of the personalities, policies, and pivotal moments that have shaped India's nuclear trajectory. The forward of the book is written by Dr. Anil Kakodkar, a renowned nuclear physicist and former chairman of the Atomic Energy Commission of India. It was an insightful discussion with the collaboration of Centre for Security Studies, in which the editors of the book discussed their interest in the subject of nuclear study, motivation and beginning of writing of the book, methodology, India’s global stance as a nuclear power and most importantly, the pioneers of nuclear physics and nuclear power in India.

The book arises from Dr. Awasthi's and Dr. Barua's profound interest in nuclear studies and their desire to narrate India's nuclear story through the lives of its key architects. The undertaking was not merely academic but a passion project aimed at highlighting the strategic, political, and personal dimensions that have underpinned India’s ascent as a nuclear power. Their research methodology involved an immersive dive into the lives of the pioneers in the field, uncovering the motivations, challenges, and triumphs that marked India's nuclear journey. This approach ensures that the narrative transcends technical jargon, making it accessible and engaging for a wide audience.

The book unfolds against the backdrop of India's strategic evolution as a nuclear power, with detailed narratives on figures like Homi J. Bhabha, Jawaharlal Nehru, A.P.J. Abdul Kalam, and

Dr. Raja Ramanna, among others. It not only delves into the scientific and strategic dimensions of nuclear development but also humanizes these narratives by spotlighting the individuals behind India's nuclear advancements.

Dr. Soumya Awasthi's introduction emphasized the timeliness of the publication of the book; in 2023, India celebrated its 25th anniversary of the nuclear test program. Dr. Awasthi's contribution in the book was on Dr. K. Subrahmanyam, about whom she mentioned many wonderful anecdotes, work ethics and multiple contributions to the Indian nuclear program.

A significant portion of the discussion was dedicated to Dr. K. Subrahmanyam, whose biography is prominently featured in the book. Known as the "Kissinger of India," Dr. Subrahmanyam's strategic vision, particularly his advocacy for India's nuclear armament in response to regional threats and global geopolitical dynamics, is critically examined. His role in transitioning India from an idealist economy to a realist defence strategist, his foundational contributions to the National Security Council Advisory Board, and his influence in drafting the nuclear doctrine underscore the multifaceted impact of his work. With the threat of China looming and the world not taking India as a serious player in the global arena, he was convinced that making, testing and having an atomic bomb in store would give to India the power to take a stance during negotiations and ensure continued and assured national security. The nuclear bomb was always meant to be a strategic tool and not a tool of aggression and hostility. Dr. Awasthi's recounting of her conversations with Dr. Subrahmanyam's family reveals a personal side to the strategist, highlighting his feminist beliefs, commitment to shared domestic responsibilities, and principled stance reflected in his refusal of the Bharat Ratna. She mentions that he was a feminist, believed in equal opportunities and shared the burden of housework and caregiving equally. These anecdotes underscore the human element behind strategic decision-making, offering a more nuanced portrait of the individuals who have shaped India's nuclear policy.

Dr. Barua's contribution to the lecture broadened the discussion to include the interplay of international dynamics in the development of nuclear strategies. The book explores the historical context of nuclear development, from the Manhattan Project and the use of nuclear weapons in World War II to the Cold War and disarmament efforts to the framing of India's nuclear strategy within a global narrative. The discussion on India's refusal to sign the Non-Proliferation Treaty due to its discriminatory nature, alongside the debate on the Baruch Plan in the UN General Assembly, highlights India's diplomatic stance on nuclear issues. This

discourse is crucial for understanding the complexities of global nuclear politics and India's position within it.

The editors emphasize that their work transcends the realms of science and nuclear power to delve into the personal stories and contributions of those who have made India a significant nuclear player on the world stage. The inclusion of chapters on figures like Arundhati Ghosh, A.P.J. Abdul Kalam, and Vikram Sarabhai, among others, showcases the diversity of contributions to India's nuclear program. The creative chapter headings, such as 'Dr. Kalam: The Scientist and Not the Politician' and 'Dr. Raja Ramanna: Nuclear Physicist with a Piano', serve to pique readers' interest and humanize the narrative.

The evolution of India's nuclear doctrine, from Nehru's idealistic vision to the pragmatic realism that emerged in the wake of regional security challenges, forms a critical part of the discussion. Jawaharlal Nehru, on many occasions, has emphasized the need to use nuclear science for peaceful purposes of economic development. Non-Proliferation Treaty was not signed by India, Pakistan, South Korea etc., on account of it being discriminatory. It allows for countries who are already nuclear powers to continue having a minimum number of nuclear warheads and puts a complete restriction on other nations on developing nuclear warheads. Baruch Plan, proposed by the USA, is known as a missed opportunity in history. It was proposed to restrict the use of nuclear physics to make weapons and to only use it for peaceful and economic purposes. Vijaylaxmi Pandit has debated the same in the UN General Assembly. The editors delve into the strategic imperatives that necessitated a shift towards a more assertive nuclear posture, particularly in the context of threats from neighbouring countries and the dynamics of global power politics. This shift, however, did not eschew the ethical debates and moral dilemmas that accompanied decisions such as nuclear testing and weaponization.

During the Q&A session, insightful questions were posed, leading to meaningful discussions on India's nuclear policy and the methodology behind the book. CSS Centre Coordinator Mehak Johari inquired about how effectively India is balancing the act of maintaining personal deterrence while advocating for global disarmament. The response highlighted India's strategy of minimum credible deterrence, which serves as a subtle yet firm assertion of its nuclear capabilities, aimed at establishing its power without overt aggression. Emphasizing the No First Use policy, the discussion underscored India's commitment to peace, showcasing readiness without the intention of initiating conflict. Additionally, India's bolstering of conventional military strengths was mentioned, affirming its stature on diplomatic fronts and its stance

against discriminatory regimes like the NPT, advocating for a fair and inclusive approach to non-proliferation.

Another student's query delved into the intention and methodology behind the book, specifically the approach to encapsulating the spirit of the personalities profiled. The authors shared insights into their extensive fieldwork, interactions with people closely associated with the nuclear program, and their interdisciplinary approach that balanced factual accuracy with capturing the essence of the individuals. The book's chapters, contributed by experts on the respective personalities, reflect a deep understanding and diverse perspectives on India's nuclear journey, from initial ambivalence about nuclear armament to a clear prioritization of economic over nuclear development.

The discussion on the need to revise India's nuclear doctrine in light of regional security challenges, highlighted by a student, touched upon the milestones of the doctrine's draft in 1999 and its release in 2003. The debate around the policy of Nuclear First Use in the 1990s and the eventual adoption of a no-first-use stance in 2003 was revisited. The consensus suggested that there's no pressing need to alter the current nuclear policy, given India's strong position in soft power and the capabilities of its strategic arsenal, like the Agni V missile, underscoring a preference for diplomacy over hard power in current times.

CSS Director, Dr. Pankaj Jha's closing remarks highlighted the importance of the work by Dr. Awasthi and Dr. Barua, acknowledging their contribution to the discourse on nuclear physics and strategy. The suggestion for future volumes to include figures like Brajesh Mishra and Bharat Karnad indicates the rich tapestry of personalities and perspectives that continue to shape India's nuclear narrative.