After the atomic bombs dropped on Hiroshima and Nagasaki in 1945, there was a race by most of the western world to acquire these weapons of mass destruction. A newly founded Peoples Republic of China soon realised its vulnerability to a nuclear threat during the Korean War when using a nuclear bomb against China was actively debated by the US. Consequently, in 1964 China exploded an atom bomb; however, Mao dubbed it as a "Paper Tiger".

The Cold War saw a profusion of development and deployment of thousands of nuclear warheads in a race between erstwhile USSR and major NATO allies. These countries developed their "Triads" to enable assured second strike capabilities. None of them declared any policy of "No First Use". The buzz of the threat of massive nuclear retaliation to any misadventure to the extent it was termed as "Mutual Assured Destruction" (MAD). Till then the only example of use of an atomic weapon was that of it being used against a non-nuclear state – US against Japan in 1945; and a threat of use also against a non-nuclear state – US against China in 1951-53. The consequences of retaliation between nuclear powered states ensured the nuclear threat to be "in-being".

This was the global strategic environment in which developing nations found themselves in where possession of nuclear weapons ensured security from being threatened or targeted by any nuclear power. In Asia, following China, India, hesitantly, went nuclear and somewhat resultantly began weaponising. Pakistan, with covert assistance from China, began its one-on-one nuclear programme with regard to India.

The Book, India in Nuclear Asia deals with the subject under six heads – India's Nuclear Force Development in 2018; Pakistan's Nuclear Thought and Posture: Implications for India; Chinese Nuclear Thought and Posture: Implications for India; The Doctrinal Background: Nuclear Deterrence in Indian Strategic Thought, 1964-2003; New Challenges for the Nuclear Doctrine: The Doctrinal Debate, 2003-Present; Indian Non-Proliferation Policy: Approaches and Challenges in the Twenty-first Century; Conclusion.

The first chapter deals with the progression of India's nuclear capability since 1998. The technological developments in the fields of fissile material capabilities, the hierarchy of vectors and the consequent deployment capability of land based systems. The air and sea based systems are discussed whereby a viable triad is deployable. The Author also discusses the developments in the field of BMD.

Discussing the Pakistan nuclear posture the Authors have dwelled on the whole range of vectors it has developed/acquired and its air delivery capability. Pakistan is striving for developing suitable naval vessels to complete its triad. Pakistan has developed low yield short range nuclear devices based on its first use policy to counter India's conventional forces and the doctrine of

INDIA IN NUCLEAR ASIA

EVOLUTION OF REGIONAL FORCES, PERCEPTIONS, AND POLICIES

BY YOGESH JOSHI AND FRANK O'DONNELL

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'Cold Start'. Indian analysts talk of nuclear warfighting in such a scenario. With its close links with China, Pakistan harbours designs for a 'full spectrum capability' to counter India's 'massive retaliation'. The Authors feel that there is a need for India in broadening nuclear strategic dialogue with Pakistan.

As regards China, the Authors opine that China is technologically superior to India and thus has an advantage. Discussing China's No-First-Use policy under a self-defence nuclear strategy makes the threat of use ambiguous. With the creation of the Rocket Force which will be deploying both conventional and nuclear missiles there is further ambiguity with regard to use of nuclear weapons in a non-contact stage of a conventional war. The Authors also discuss the land and sea based nuclear threats and India's capability to counter these. China does not acknowledge India as a Nuclear Weapon State but its nuclear posturing against India is for the use of nuclear weapons if need arises – which goes counter to its stated policy on 'no use against non nuclear states'!

In the chapters on background of India's nuclear doctrine and challenges to it the Authors have argued that there is a need to review the 'no-first-use' clause and also the 'massive retaliation' response, which, ab inito may force Pakistan of initiating a massive first strike rather than what it was designed to do that of being an effective nuclear deterrence. A flexible punitive response is suggested to be considered instead. The Authors mention of some defence analysts and parliamentarians recommending development of nuclear warfighting capability but claim that such a recommended was not being considered.

In the next chapter the Authors mention of the India's role in the non-proliferation arena. However, they opine that with the development of missile technology and acquiring vectors of ranges as that of ICBM's there is a question mark on India's claims. Similarly, developing MIRV's also indicates that India is not a status quo nuclear entity. The chapter deals with the global scenario and the challenges that are posed by various non conformist states.

Some serious questions that are thrown up are: one, the effectiveness of nuclear deterrence between NWS. Two, level of nuclear response to counter force targeting. Three, disregarding any moral injunction in counter value targeting. Four, nuclear elites club secure for themselves a "have all" policy but dictate terms and bindings to the "have not's".

Overall, the Book is a comprehensive discourse on the nuclear scene in Asia and the challenges that India faces.

—Lt Gen JS Bajwa