

CENTRE FOR LAND WARFARE STUDIES (CLAWS)

Fellows' Seminar: Five Decades of Nuclear China: Trends and Implications 03 April 2014

SEMINAR REPORT

General

A Fellows Seminar on '**Five Decades of Nuclear China: Trends and Implications**', was conducted at CLAWS on 03 April 2014. Dr Monika Chansoria, Senior Fellow CLAWS presented her work, carried out over the previous two years on the subject. The Seminar was chaired by Gen Deepak Kapoor, former COAS. The two discussants were Maj Gen Dipankar Banerjee (Retd) and Shri MV Rappai, from the Institute of Chinese Studies. The seminar was attended by serving officers from the Armed Forces, Veterans, the strategic community and the CLAWS faculty.

Opening Remarks by Chair: Gen Deepak Kapoor, former COAS

One of the critical deficiencies India had suffered with China is lack of credible intelligence and adequate knowledge on Chinese activities. These can be attributed to the efforts by the Chinese to maintain secrecy and inability of the Indian intelligence to break that shroud of secrecy. For instance post-Independence we lost Aksai Chin, and came to know of Chinese perfidy only after they had built road there. We are still deliberating if China is diverting waters of the Brahmaputra. This dismal picture has changed thanks to satellite imagery and worldwide attention on the Chinese. This probably also has to do with the fact that China is now a global power. In India too, there has been an exponential increase both in the level and quality of China watching. Like all other projects, the Chinese nuclear program has also been shrouded in secrecy and ambiguity. That has resulted in a degree of anxiety all around. In the midst of 'No First Use', there have been voices from within China talking about taking appropriate action, if they presume a nuclear threat. Is there an attempt to shift goal posts by the new regime? Is there a possibility that the Chinese may use preemption when it comes to nuclear weapons? This talk is very timely in that context and should be able to answer some of these questions.

Speaker: Dr Monika Chansoria, Senior Fellow, CLAWS

Dr. Monika Chansoria spelt out China's journey of five decades in the nuclear domain and said that China has undergone a protracted stint from the time when Mao Zedong derided the bomb as a "paper tiger" in 1946, to the development of modern nuclear weapons and missiles. It becomes only obligatory to chronicle the policy changes within China that steered the leadership towards grasping that nuclear weapons will fundamentally redefine China's quest for security. The Chinese leadership's nationalistic

ideology and concepts of force and diplomacy shaped its perceptions of the enduring dangers that confronted China. Initially, Beijing's political corridors dismissed the dangers of a nuclear war while reaffirming the principles of a "people's war", however, later, witnessed Mao recasting the struggle into one with a military-technical emphasis that relied on assured nuclear retaliation to ensure effective deterrence.

China seeks to improve the survivability and mobility of its existing strategic nuclear forces through a robust nuclear modernisation campaign including nuclear weapon miniaturisation technology. This subsequently, leads onto a pressing debate whether China would aspire to modify, qualitatively and quantitatively, its nuclear posture without necessarily deposing its brand of nuclear minimalism, which has been the core of its nuclear strategy, at least for public consumption. It has been a matter of great interest as to how such sophisticated technological, military feat was ultimately accomplished by a poverty-stricken nation with limited industrial and scientific resources. This can be considered as being extraordinary especially in the midst of enormous internal political turmoil of the Great Leap Forward in China. The leadership's nationalistic ideology and concepts of force and diplomacy shaped its perceptions of the enduring dangers to China and to the restoration of China's international position.

As Beijing leaned closer to Moscow during the Korean conflict, Washington increasingly focused on ways to exploit China's weaknesses. At the end of the Korean War in 1953, the Chinese knew firsthand the devastating might of modern arms and the high cost and probable military irrelevance of earlier revolutionary doctrines. Mao understood the importance of nuclear weapons and the power they bestowed. Particularly revealing of his great concern with what he called "US atomic blackmail" were his remarks at the end of January 1955. The rate of development of China's nuclear weapons programme was influenced by deterioration in China's economic situation since 1959 and the withdrawal of Soviet technicians in mid-1960, presumably including those attached to China's nuclear programme.

In 1964, planning for the detonation of the atomic bomb dominated everything else in the science district and throughout the base. With the work finished on the bomb assembly at the plant in the Jiuquan complex, the word was flashed to the Lop Nur test base that the bomb and its assemblers would begin to arrive. Finally, on October 16, 1964, China detonated its first nuclear weapon in the Xinjiang desert near the oasis of Huangyanggou, 150 kms northwest of the Lop Nur marshes.

The Chinese strategic tradition has given paramount importance to—more than achieving victory—"occupying the undefeatable position" (*li yu bubai zhi di*). China's acquisition of nuclear weapons seems to be better explained by a combination of

objectives than by a single, or a purely military, purpose. Nevertheless, the most powerful motive, particularly during the pre-detonation period, was to regain national self-esteem. China's nuclear policy, hand-crafted by Mao and endorsed by every one of his successors, emphasised upon nuclear minimalism, at least publicly. This was manifested in the form of a small-sized nuclear force structure. For China's political and military leadership, China's nuclear weapons were "one element, but not the decisive element of the PLA's comprehensive deterrence posture." The corollary of Mao's pursuit of a minimal second-strike deterrent force meant to project threat was his embrace of a No-First-Use (NFU) policy meant to project reassurance and foster stability by calming the nerves of potential foes, nuclear and non-nuclear alike. Chinese writings at that time reflect that along with small arsenals, restraint in their use formed the second pillar of China's nuclear policy.

Analysts in China have pointed up that China's nuclear forces serve a dual purpose. One is to deter a potential adversary's nuclear use/threat of use; the other being to retaliate against a nuclear first-strike against China. However, it remains ambiguous as to how would the Chinese nuclear force be applied in circumstances where its vital national security interests (say, Taiwan) are threatened and conventional deterrence and use would fall short of preventing either Taipei from actions that are considered to be moving toward *de jure* independence or the United States from intervention. Beijing deliberately created and maintained a cloud of "calculated ambiguity" around the development, deployment and employment of its nuclear weapons—a trend that continue till date.

During the decade of the 1980s, these principles called for the possession of a secure second-strike nuclear capability to prevent strategic strikes on the mainland and to deter other nuclear powers from using nuclear weapons to coerce China—essentially an extension of Mao's views. There are several internal ambiguities and tensions that have been noticed in recent Chinese writings on nuclear weapons and deterrence—which is critical in that it is these tensions that will serve as important indicators of the overall direction of Chinese nuclear doctrine in the future. The most glaring ambiguity in China's doctrine is the conditions under which the NFU applies—specifically in actual combat situations. China is already claiming achievement of "strategic deterrence" by enhancing capability of its intercontinental strikes and creating a versatile missile inventory.

China is striving to maintain its nuclear deterrent through robust nuclear modernisation efforts, as part of the larger military modernisation campaign. Beijing's attitude of secrecy over its nuclear weapons meant for battlefield use (often referred to as tactical nuclear weapons) continues to be part of the Chinese strategic tradition of ambiguity

cultivation. Today, China's nuclear arsenal is estimated to include 200-240 nuclear weapons, with a stockpile of fissile materials estimated to include 16 ± 4 metric tonnes of highly enriched uranium (HEU) and 1.8 ± 0.5 tonnes of weapon-grade plutonium.

In the over four decades since the time that the PLA's Second Artillery Force was established, it has grown into a strategic force equipped with both nuclear and conventional missiles for conducting nuclear counterattacks and precision strikes with conventional missiles. The Second Artillery Corps is no more an exclusive nuclear missile force owing to the introduction of new conventionally armed ballistic missiles, and fielding greater numbers of conventional MRBMs in order to increase the range to conduct precision strikes against land targets, naval ships, including aircraft carriers.

China currently participates to varying degrees in multilateral regimes dedicated to the non-proliferation of chemical, biological, radiological, and nuclear (CBRN) weapons including the Zangger Committee, the Nuclear Suppliers Group and the Wassenaar Arrangement. Although Chinese controls on the trade of sensitive WMD-related materials have improved over the last decade, concerns remain about China's proliferation of WMD-related technologies. China's role in weapons proliferation has been at the centre stage indulging in ambiguous technical aid and assistance (vs. transfers of hardware), indigenous capabilities, longer-range missiles, and secondary (retransferred) proliferation cycle. China has been a "key supplier" of technology, particularly PRC entities providing nuclear and missile-related technology to Pakistan and missile-related technology to Iran. China has determinedly used the proliferation card over the past few decades far and wide, supplying missiles and missile components to Iran, Iraq, Libya, North Korea, Saudi Arabia and Syria, and nuclear materials/technology to Algeria, Argentina, Brazil, Iran, Iraq, North Korea and South Africa.

The vulnerability of modern states to armed conflict with conventional weapons, coupled with the possibility of it extending into the nuclear realm, tends to accentuate the contextual and operational significance of deterrence. CBMs help to untangle the qualms and complexities, serve to reduce tensions and promote regional security. The present scenario of "non-negotiation of nuclear CBMs between India and China" only tends to add to the security dilemma between Beijing and New Delhi.

Discussant 01: Maj Gen Dipankar Banerjee (Retd)

The relevance of nuclear weapons has changed. They are becoming less and less important as weapons of war. Its use is no longer in the realm of tactics and the role has become strategic. There is nothing tactical in tactical nuclear weapons. The decision to use them has to come from the highest levels of policy which is not tactical and the

impact is global which makes them essentially strategic. They are now being replaced by more capable conventional weapons. The prompt global nuclear strike programme of the US intends to strike any target anywhere on the globe within one hour with massive conventional destruction capability. This is possible by using hypersonic missile and kinetic weapons. The means do exist and will be operational in sometime. These capabilities reduce the importance of nuclear weapons.

Nuclear weapons will remain in the picture for some time to come. The first Gulf war has changed the way war is conducted. The Chinese also realised this and had to modernise their military and capabilities. China-Soviet relations were always very complex. During Mao's visit to Moscow, Russia had agreed to help China in a remarkable way. Nowhere in world history has one country assisted another as Soviet Union did to China. Russia has given China every help it was asked for in developing capabilities. Without that initial assistance, China would not have been able to achieve that breakthrough. Today China has built all round technological capability and is a global leader. There is a need for a dialogue between India and China on a whole range of nuclear issues and the sooner we start the better it is.

Discussant 02: Shri MV Rappai, Institute of Chinese Studies

The book when released will raise lot of questions about Indian and Chinese nuclear issues. There are three issues I want to highlight. Nuclear weapons issues, disarmament and nuclear power. Nonproliferation is what we talk about but disarmament is the ultimate goal though it is nowhere in sight. After Fukushima, I am not very hopeful of nuclear power. We need greater transparency and debate in the public domain. From China we can learn on the economic side to leverage our strengths and develop our technology.

I agree we need a dialogue but it can only happen from a position of strength. If we are to debate with China we need sufficient warheads and missiles in our inventory. So even though there is so much difference we need to build certain parity to negotiate better. We have certain advantages and certain weaknesses. We need to identify their weaknesses, be it in cyber, space and so on.

About Sino-Soviet relations, we had no information about their cooperation. Now we need to look at recent issues in Ukraine and Crimea and what will happen if China and Russia get closer. We cannot survive on a series of imports. We are a nation of one billion plus people with some scientific capabilities. We need to build them indigenously. Why can't we upgrade and leapfrog some of the developments. That's what China has done leveraging their science and technological base in the last 20-30 years. They signed purely civilian scientific agreements and built their base which helped the

defence sector. We need to look at some of these integrated approaches which China has successfully done.

In the whole nonproliferation discourse China is not the only proliferator. The US has developed a technology, the laser enrichment programme which was shared completely with South Korea and later lot of information reached China. France and Germany also helped the programme of South Africa at different times. Everyone knew about AQ Khan but no one responded. The issue is how can we understand and create our deterrence and build our scientific and technological base.

About our nuclear weapons, is DRDO capable of producing and handling them? What is the role of the army and air force? It was fine till sometime but now the armed forces should look into the issue and get into an informed debate on this.

Discussion:

- On proliferation, the west views it as such, while the east sees it as securing their security interests.
- The term 'tactical nuclear weapons' is misleading. We should use the term battlefield use of nuclear weapons. China has the capability to miniaturise warheads and Pakistan claims to have that capability.
- China is the first to commit for a no first use and not to use nuclear weapons against non-nuclear weapon states but now the policy seems to be changing. It seems more of a political statement at that time. However, the Chinese too, like India, view them as political weapons for deterrence.
- Chinese have gone for nuclear, space and information warfare as three aspects of development and have integrated them. Now the interplay will start and nuclear will probably go down and others go up in terms of C4I2SR capabilities. India has to objectively state the targets and take them up.
- Chinese quest for rare earth metals is significant as they form the core of all strategic capabilities.
- There is a need to develop capability to counter China. The strategic time frame is shrinking and India needs to act fast.
- For the Chinese, the focal point for nuclear weapons and BMD is the US to challenge their supremacy in the Pacific.

Closing remarks by the Chair: Gen Deepak Kapoor, former COAS

There are two faces in Chinese nuclear policy, the public facade and the actual face. The public facade is what we see and is undergoing a gradual change today. The real change will come out once the Chinese are confident of their standing in the world

order. The doctrines, whether on land or elsewhere have undergone a change to suit their convenience.

There is a striking similarity between what the Chinese have done and how the Pakistani's are following, whether in terms of the nuclear programme or the missile development programme. In fact, given the kind of confluence since the early 60's whatever the Chinese have acquired over a period of time has been transferred to the Pakistani's either directly or through North Korea in case of missiles. We have an issue in terms of the fact that the two powers on our eastern and western borders and with which we have serious border disputes are following a joint policy as they are the challenges we have to face.

On the issue of position of strength we need to introspect whether we will be able to come to that position of strength. Their official defence expenditure is three times that of ours for the last two decades. In fact our share of defense expenditure in GDP has gone down from 2.1 percent to 1.19 percent today. Their unofficial expenditure is USD 200 billion according to SIPRI. That's the differential we are talking about. So dialogue on an equal footing is hard to come by and needs some serious efforts.

Concluding Remarks by Maj Gen Dhruv C Katoch, SM, VSM (Retd), Director, CLAWS

The response of the Indian strategic community should be very clear in terms of the Indian Nuclear Doctrine. Use of any nuclear device against India, including tactical nuclear weapons will invite massive retaliation from India. The Indian Doctrine is clear and unambiguous and must be noted by those who have hostile intent against the country.