

Cyber Warfare & National Security Strategy*

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Introduction

Lieutenant General PK Singh, Director USI, distinguished members of the USI, members of the academia, diplomatic and press corps, ladies and gentlemen; I consider myself privileged to be here amongst you to deliver the Eleventh Major General Samir Sinha Memorial Lecture on the subject of 'Cyber Warfare and National Security Strategy'. I am thankful to USI for giving me the opportunity to speak on an issue of such contemporary relevance and importance. As Chairman NTRO, I feel a particular sense of criticality and urgency towards the issue. The topic is so vast and complex that an address of this nature may not be able to do full justice to it.

I would like to emphasise that what I say today are my personal views which do not necessarily represent the views and official position of the Government of India. While addressing today's gathering of soldiers and strategists, I will try and focus on those aspects of Cyber Warfare and National Security Strategy which would interest you. First and foremost, one is convinced that Cyber Space has blurred all conceptual and physical boundaries as we understand them in the field of warfare till now. I will briefly touch upon the evolution of society and warfare.

Human society has in the last 500 years witnessed by and large three phases of socio-technical revolution covering the periods of the 1st and 2nd Industrial Revolutions and finally the current Information and Communication Technology (ICT) Revolution. Social structures, governance and warfare have also undergone evolution in sync with these phases of our society. It may not be incorrect to say that nothing like ICT has ever been witnessed by human society - in terms of technology itself, its impact on all aspects of our lives and the pace of change that it has precipitated.

At the core of the ICT Revolution is the ever crucial, abstract, intangible commodity - information; whether it is data, intelligence, knowledge or wisdom. Information is a virtual commodity, having some rather unique attributes. It can be shared without its value being reduced. It can be stolen and is not measurable. The same information can exist in more than one place at the same time. It is non linear in its impact; small quantities can have large effects.

Impact of Information and Communication Technology

In today's world ICT is omnipresent and it pervades every aspect of our lives. State-of-the-art technology, ever-improving performance and tumbling costs have resulted in widespread proliferation of ICT. The ICT revolution has changed the world to a border-less entity compelling the creation of a new world order. The Internet as a network of networks has reshaped large parts of the world as a borderless world of convergence between communication and computers resulting in an unprecedented integration of peoples, structures and processes.

ICT has enabled the efficient collection and use of information. Various elements like processing machines, storage devices and communication networks etc form its core components. The large presence of ICT in public infrastructure, both critical and non-critical, has emerged both as a benefit and a threat. The technology trajectory has resulted in an ever increasing social dependence on ICT structures and mechanisms as never before. Today technology has brought ICT within the reach of the un-initiated which has resulted in its wide social impact. The Social Networking and Mass Communication systems have networked societies and individuals as never before. On the business side, ICT is today the lead money spinning industry. With these attributes, ICT and its related infrastructure have now become critical assets. And like any other national asset, ICT has become an important target for adversaries as well.

As warfare experts would like to say, ICT now forms the 5th or 6th most critical dimension of modern warfare, depending on how one differentiates between electronics and Cyber Space technologies.

Cyber Space and Cyber Warfare

That brings us to Cyber Space, which though an offshoot of ICT, has now assumed an identity of its own. Like ICT, Cyber Space too has assumed huge proportions. ICT and Cyber Space have offered new frameworks for functional interoperability between all forms of human and Electromagnetic interactions. It is no longer a high tech venture which used to be the exclusive preserve of scientists and technologists. An important evolutionary aspect of Cyber Space is that it has emerged as a largely de-regulated medium. This has presented a new challenge to certain societal aspects which includes governance, the threat landscape and security.

Though nation states do often attempt to create regulatory structures, the Internet seems to have defeated most such endeavours, atleast till now. Like ICT, Cyber Space has become an important national asset spanning across all sectors, including governance and security. New capabilities have enabled new threat vectors for Cyber enabled warfare and Cyber Warfare itself. It has made the commission of crime easier and crime detection even more complex. While it is not my intention to over state its importance, Cyber Warfare is likely to decisively influence the pre-conflict stages and eventually the outcome of conflict itself. We need to appreciate that due to the omnipresent nature of ICT and Cyber Space, it is possible that this may lead to a new form of National and Total War.

Some distinctive features of Cyber Warfare are :-

- (a) Cyber Warfare can enable actors to achieve their political and strategic goals without the need for armed conflict.
- (b) Cyber Space gives disproportionate power to small and otherwise relatively insignificant actors.
- (c) Operating behind false Internet Protocol addresses (IPs), foreign servers and aliases, attackers can act with almost complete anonymity and relative impunity, at least in the short term.

(d) In Cyber Space the boundaries are blurred between the military and the civilian, and between the physical and the virtual; power can be exerted by states or non-state actors, or by proxy.

Cyber Space can be viewed as the 'fifth battle space', alongside the more traditional arenas of land, air, sea and space. Cyber Warfare is best understood as a new but not entirely separate component of this multifaceted conflict environment. Warlike actions in Cyber Space are more likely to occur in conjunction with other forms of coercion and confrontation. However, the ways and means of Cyber Warfare remain undeniably distinct from these other modes of conflict.

It is said that 'war' and 'warfare' have an 'unchanging nature', yet they have a 'highly variable character': 'We know with a sad certainty that war has a healthy future. What we do not know with confidence are the forms that warfare would take. Although the concept of revolution in military affairs (RMA) is typically associated with technological advancements, it also involves changes in strategy, operations and tactics. With the dominance of information in all spheres, new strategies would keep evolving in both defence and offence.

The growing relevance of Cyber Warfare in RMA is on expected lines. At the turn of the century, the Pentagon adopted the doctrine of Network-Centric Warfare (NCW) and set out its vision of autonomous 'swarming' and 'self-synchronised' war fighting units connected to one another by high-speed data links and superior battlefield awareness. This brings us to the 'chaoplectic' form of warfare fought by decentralised networks.

Military theorists allude to the 'swarm', the networks of distributed intelligence that enable bees, ants and termites to evolve complex forms of collective behaviour on the basis of the simple rules of interaction of their individual members. Of particular interest are the resilience and flexibility of these swarms as amorphous ensembles whose continued existence and successful operation is not critically dependent on any single individual. Military swarms promise not only more adaptable and survivable forces but also new offensive and defensive tactics better suited to the contemporary battle space. Beyond the flexibility and evolutionary capability, it is also claimed that military swarms can converge on their target from all directions in offensive bursts, thereby maximising the shock effect.

Hostile actors in Cyber Space can make use of a wide range of techniques. Malicious software (malware), networks of 'botnets' and logic bombs can all be employed to navigate target systems, retrieve sensitive data or overrule command and control systems. Although the technology and skills involved in designing, building, testing and storing these weapons may be complex and advanced, the means by which the weapon is delivered and by which the desired damaging effect is caused may be astonishingly simple. One well-known example occurred in 2008 when highly classified US Department of Defence (DoD) networks were reportedly infected by an unknown adversary that 'placed malicious code on USB thumb drives and then dispersed them (in parking lots) near sensitive national security facilities. After a curious finder inserted the drives into computers, the code spread across their networks.

Let us examine the direct military threats emanating from Cyber Space. Cyber technology has clear military applications which can be exploited in conflict situations. Whether through military equipment and weapons systems, satellite and communications networks or intelligence data, the armed forces are highly dependent on information and communications technology. While it provides immense advantages it also throws up major challenges in terms of information overload making assessments difficult. Bombs are guided by GPS satellites; drones are piloted remotely from across the world; fighter planes and warships are now huge data processing centres; even the ordinary foot-soldier is being wired up. In a digital, knowledge-based society this is to be expected. But while technology brings opportunities it can also create vulnerabilities. The major powers have long recognised the strategic and tactical value of Cyber Space. Similarly, weaker states are now seeking to partially offset this asymmetry by developing their cyber capabilities. Military strategists have come to view information dominance as the precursor for overall success in a conflict.

Impact on National Security and Warfare

The nature of Post-Modern Conflict has undergone a huge change, especially since the Gulf Wars and 9/11. Both state and non-state actors have achieved threat parity and terrorism is likely to dominate the conflict scenario. Cyber Warfare has emerged as an important new element of warfare. Cyber Warfare is arguably at the most serious end of the spectrum of security challenges posed by - and within - Cyber Space. Just like the tools of conventional warfare, cyber weapons can be used to attack the machinery of a state, financial institutions, national energy, transport infrastructure and even public morale. ICT and Cyber Space have had a profound effect on the affairs of the state. Free flow of information across TV screens, e-mails, cyber chat rooms etc contribute to wider event awareness, debate and transparency. Who could have imagined the Arab Spring and Shahbagh movements 20 years ago. But the Information revolution generates its own contradictions. It strengthens forces of both anarchy and control.

From what we see today as part of youth movements powered by Social Media, the individual has become more empowered as compared to social and government structures. Many hierarchies lie destroyed and are being replaced by new and more broad based power structures. The ICT revolution also offers too many choices, greater insight and has the potential to increase the fog - both in peace and wartime. As was brought out earlier, ICT or Cyber Space structures have become vital national assets.

The National Information Infrastructure, including computers, networks, storage devices, communication systems, cyber enabled and cyber controlled systems etc, has assumed an importance unheard of before. As has been shown in many Hollywood movies, cyber linked physical infrastructure is now a genuine target of physical destruction or disablement through cyber means. Hardware is just as susceptible as software. Backdoors and malicious code or circuitry hidden inside counterfeit hardware and software, all the way down to the basic input-output system (BIOS) and instructions set inside the integrated circuit chips is a case in point. Any vulnerability in the BIOS of microprocessors can be exploited to gain control over the computer. The design, manufacturing and testing stages of IC production are done in a diverse set of countries. This makes quality control a difficult proposition. With commercial off-

the-shelf (COTS) procurement and global production, there is an increasing risk of covert hardware/firmware based cyber attacks. Most of us know what a digital worm or a virus like Stuxnet can do to the physical world of Supervisory Control and Data Acquisition (SCADA) controlled systems. Aviation, railways, power systems, food supply chains, R&D facilities, e-governance structures are today vulnerable in a threat mosaic never encountered earlier.

ICT's impact on financial systems including banks, stock-exchanges, electronic fund transfer mechanisms, e-commerce architectures etc has resulted in new threat and security frameworks. Defence assets, structures and related vulnerable areas and vulnerable points are under severe threat today, both during peace and wartime.

Let us now look at what is under threat in the world of ICT itself. The Internet population has jumped from 1.15 billion users in 2007 to 2.27 billion in 2012; i.e. it has almost doubled in five years. The largest and fastest rising numbers are in Asia with India and China at the top is no surprise. In an Internet minute, nearly 1 terrabyte of data is shipped, 1300 new mobile users added, 204 million e-mails sent, more than 6 million Facebook views generated, more than 2 million search queries on Google, 62000 hours of music transacted, 30 hours of video uploaded and 1.3 million video views generated on Youtube.

For people of my generation this sounds mind-boggling. But let us get shocked further. Today the total number of networked ICT devices equals the world population. By 2015 these will be twice the world population at that time. Today Global IT revenues have exponentially jumped from USD 350 billion in 1997 to around 120 billion in 2012. In all, including services, telecom etc, ICT can be valued at around 6.8 trillion dollars.

Issues

The Internet technologies, which employ open standards for exchange of information and have made this mind boggling scale of things possible, are not fundamentally secure. This fact, as a result of which systems remain ab-initio vulnerable, needs to be appreciated when studying the security aspects. The systems were made even more vulnerable due to compromises affected for commercial convenience and making them user friendly.

The threat to information infrastructure today spans processing elements, storage systems, transmission networks etc. On the other hand, easy availability of information to the adversary poses a challenge which has to be dealt with without affecting own systems. Today cyber enabled Information Warfare has further enhanced the threat to the decision making process through more efficient information disruption and misinformation mechanisms.

Social Media

The grievances in the Gaza War may be ancient, but some of the weapons reportedly being used are spanking new; reflecting the changed nature of war in this cyber era. One reads for example about a part of the war being tipped in a side's favour based on the number of Twitter posts far outnumbering those of the other side. Recently in Egypt and Libya, massive riots were led by extremists who were apparently united and who stormed embassies. Riots and demonstrations followed all over the world. It has been reported that the attacks on the embassies were executed in a coordinated manner on multiple embassies at the same time. The attacks were reportedly incited, spread and well coordinated through social media like YouTube, Facebook and Twitter.

Social media seemed to have been employed to stoke an insurgency. It illustrates how, often something innocuous can be get blown out of proportion by certain powers with an agenda using this new weapon in their arsenal. This level of social manipulation can be readily adopted by foreign powers to foment trouble well outside their own national borders. The magnitude, scale, apparent-spontaneity, decentralised nature yet well networked and coordinated nature of this attack - seem to fit well with the theories of 'Chaoplex Warfare' mentioned earlier.

This may be the right moment to take a peep at the exotic world of Cyber threats and terms like hacking, phishing, Denial of Service Attacks, Botnets etc. Without going into jargon, these are various forms of threats and delivery systems. For example, as is apparent from the term, Denial of Service (DoS), is actually denying users a service mostly through inundating the Service Provider.

Botnets are groups of zombie computers under the control of a remote and invisible hacker forced to function in a manner not desired of them. Today hackers can control an army of bots all over the world which can be used to attack a system, a network or networks, a service or a nation. Can these zombie army of bots, involving your and my computers, be used to attack a nation. Yes, it is possible. Remember Estonia, where an entire nation was paralysed by a cyber attack. Estonia happened to be one of the most wired countries at that time.

When these bots are used to fire large cyber traffic to inundate an entire target infrastructure the DoS becomes Distributed DoS. This seems to have happened to the US banks recently. You may recollect what happened last month to the Spamhaus organisation which deals with anti-Spam operations. It was probably the largest cyber attack which has come to notice with thousands of Bots initiating millions of transactions on Spamhaus servers, effectively shutting them down and even slowing down the Internet. We all know how Stuxnet was used to disable the Iranian nuclear programme attacking the Siemens control systems deployed for operating centrifuges. Or for that matter the subsequent Flame virus which was focused on Middle East for information collection. Around 30000 bots were used to target Aramco of Saudi Arabia which is one of the largest oil producers. The production there was disrupted for many days.

Attribution and the China Bogey

The People's Republic of China (PRC), in particular, has long recognised the strategic and tactical value of Cyber Space. The PRC is believed to be focusing inter-alia on its cyber capabilities to counter the current military asymmetry with the USA in terms of military and technical hardware. Chinese military strategists have come to view information dominance as the precursor for overall success in a conflict.

A lot is written about China's prowess in the field – this is a possibility that cannot be denied given the fact that China has emerged as a formidable force in the world of technology. The Titan Rain attacks in 2007 – one of the most large-scale infiltration of the US and UK government departments, including the US DoD and the UK Foreign and Commonwealth Office – were attributed to China, and had allegedly been under way since 2002. Furthermore, in Mar 2009 China was linked to 'GhostNet' when it was revealed that a large-scale spying network had attacked a significant number of government departments and strategic targets, including the Tibetan community.

On 19 Feb this year, a report by the US-based Cyber Security firm Mandiant accused the Chinese military of being behind a series of cyber attacks against businesses, institutions and infrastructure in the US. That was not the first time that China received accusations of this type, although the novelty was that the report localised in detail the origins of the attacks. According to Mandiant, a Chinese army building in a suburb of Shanghai was responsible for most, if not all of the attacks.

Beijing categorically denied the charge adding that it is also the victim of numerous attacks, which have increased over the years and most of them are from the North American country. A computer security official said China had become the world's biggest victim of cyber attacks, with a report from a national computer monitoring centre revealing that many domestic computers were controlled via overseas-based IPs last year. A total of 47,000 overseas IPs were involved in attacks against 8.9 million Chinese computers last year, compared to nearly 5 million affected computers in 2010, according to a report issued by the National Computer Network Emergency Response Coordination Centre of China (CNCERT/CC), China's primary computer security monitoring network. Most of the IPs originated in Japan, the US and the Republic of Korea (ROK), according to the agency. Since attribution is very difficult in the cyber domain, it is difficult to conclusively support the argument that China is actually behind much of what is being witnessed.

Indian Cyber Scenario

In India, as we are all aware, there is a near total reliance on external sources for hardware and software (operating systems, application software, antivirus, network protocols et al). In view of this, it is virtually impossible to have complete information on hidden vulnerabilities such as the presence of trap doors and malware.

Some mitigation strategies could include those most essential for resilience, namely a full understanding and control over the technologies and systems of the critical infrastructure, cyber security awareness and education, sanitisation techniques and strong cryptography, good security-enabled commercial information technology, an enabling global security management infrastructure and a strategic push to investment in indigenous development/production of hardware and software. This needs a focus on Research and Development particularly in areas of : authentication technologies; secure fundamental protocols; secure software engineering and software assurance; holistic system security; monitoring and detection; mitigation and recovery methodologies; cyber forensics: catching criminals and deterring criminal activities; modeling and testbeds for new technologies; metrics, benchmarks and best practices.

Technology and R&D

Cyber technologies are a very new field as compared to other established technology areas. These technologies have matured over the last two decades or so. Hence there is a large need to develop not only secure cyber frameworks but also put in place defensive cyber technologies to guard against various threats which were mentioned earlier. It is an understatement to say that a fast moving R&D framework is the bed rock of any cyber security endeavour. As has been enumerated in some of the international cyber security documents, we require to develop R&D strategies to enhance the security, reliability, resilience, and trustworthiness of digital infrastructure. The R&D effort also needs to be coupled with technology forecasts to cater for immediate and long lead items.

There is a pressing need for developing technologies for various segments which include secure data communication technology, encryption frameworks, resilient and sustainable digital infrastructure, large scale realtime data processing systems, threat identification and intrusion detection systems etc. While the technologies, I just mentioned, have more to do with enabling mechanisms, the cyber defence and mitigation strategies require a parallel development effort to cater for containing the fallout of major cyber attacks. In addition, this also needs constant evolution to keep pace with the new types of cyber threats which are encountered on nearly hourly basis.

While development of technology has a dynamics of its own, a realistic appraisal of the available technologies and their likely trajectory, needs to be undertaken in a comprehensive manner. Such forecasting is required both for the enabling systems and from the cyber warfare point of view. This also includes constant and independent analysis and assessment of vulnerabilities in the existing systems, hardware, networks, processing elements etc. This is a very challenging task in its own right. A word about who needs to do all this.

Based on what we understand of the all pervasive nature of cyber space and its effect on all aspects and dimension of our societies, it is not possible for any agency, sector or government to go it alone. It is inescapable that various arms of government, academia and industry collaborate and coordinate efforts to cater for the demands of such a fast changing field. It can be appreciated that entities both within the government and outside have strengths of their own which are best suited to take on the respective areas of responsibilities.

Cyber Security Manpower

I would also like to emphasise on a very important related aspect. While we have talked so much about cyber technologies, its potential and dangers, it needs to be appreciated that it is finally the man behind the machine which is the most important factor for any success, especially in the cyber world.

The developments during the last one to two decades indicate that while sufficient expertise is available in

the field of exploiting cyber technologies, it is the cyber security expertise which is not available in the required numbers as yet. In addition, such expertise is also not available with the required capability levels. We need a constant supply of capable man power from academic institutions and industry to pitch in for defending Cyber Space. It is a long haul but an institutionalised start needs to be made; otherwise while developers would have created systems with enormous capabilities, defending such systems will lag behind which could result in a potentially disastrous situation.

Secure Technology Framework

The panacea for such a state is indigenisation and this is being aggressively pursued. We need to be able to develop world class products (operating systems, application software, hardware such as network components, even chips being used etc) that we can use with the kind of faith that comes from knowing everything about it. Greater awareness of Cyber Security aspects through training, information dissemination, adoption of best practices, regular cyber audits by experts etc would also contribute significantly. This aspect is of great strategic importance and needs active involvement of academic institutions, industry, think tanks and government institutions.

Cyber Space is also a global medium and we need to partner with our friends across the world. While some measures have already been initiated, India needs to actively participate in the international Cyber Security dialogue to safeguard our interests.

The Challenge

The scale of ICT applications and their openness which is conducive to growth, throw a sort of 'grand challenge problem' in protecting cyber assets from penetration and attacks. Cyber-attacks are now becoming the stuff that we read of at breakfast in our morning newspapers. In this regard I have already given examples of incidents reported in the recent past. A significant area of concern is cyber espionage which is the most prevalent of the cyber activities. Whether used to uncover sensitive government information, steal trade secrets or commercial data or as part of intelligence or reconnaissance work, it fits into the doctrine of using 'information superiority to achieve greater victories at a smaller cost'.

Many nations are pursuing offensive cyber capabilities, but not much is revealed about this in the public domain. However, in a recent departure from this norm, Chief of the US National Security Agency recently disclosed that the US DoD is establishing a series of cyber teams to combat the threat of a digital assault that could cause major damage and disruption to the country's vital infrastructure. He mentioned that 40 teams should be ready by 2015 and that 13 of the teams will be offensive fighters specifically designed to attack other countries while the other 27 cyber teams were being established to support the military's warfighting commands. Some others will protect the Defence Department's computer systems and data.

There can be a psychological dimension to cyber-attacks. The infiltration, of what are assumed to be secure systems and critical infrastructure, highlights national vulnerabilities and weaknesses. This can provoke feelings of insecurity which could indeed be the attacker's goal; in the same way that the fear of terrorism and its potential harm can have a detrimental and disabling effect almost as great as the terrorist act itself.

Developed countries frequently complain about large scale espionage and surveillance operations by cyber attackers, with their defence and hi-tech industry as one of the prime targets. In the case of suspected state-sponsored actions it is difficult to establish beyond any doubt that the order to attack originated in the executive or presidential office, let alone a capital city. Furthermore, the difficulties of attribution allow a degree of plausible deniability. Perpetrators can cover their own tracks and implicate others, particularly when third-party servers and botnets in unrelated countries can be used to originate attacks and provide cover for the actual attacker. The increasing integration of National Information Infrastructure with military information infrastructure has diffused the boundaries between civil and military information networks.

Can we imagine what will happen to us in a situation like Estonia, the US or Saudi Arabia? Do we fully understand the threat? Do we have a measure of it, and are we prepared for it? Are we still working with archaic civil-military frameworks? Is there a difference between peace and wartime? Are we matching up with the faster information proliferation and propagation mechanisms leading to information flow management problems? Are our business models geared for the threat? Does the industry and the government's L-1 system of procurement provide for the commercial vs security compromise? Do security overheads not often tempt us to opt for relatively unsecured but operationally capable systems for ease of operation and management? All I can say is that policy frameworks are in the process of being put in place to address such issues.

Policy Options

Never in the history of national security management have such high demands been placed on information collection mechanisms which need to process such large amounts of data and at such high speeds. A 24x7 situational awareness and matching fast paced mitigation mechanism can not be delayed any longer. However, this may agitate some privacy advocates who may be justified in treating national security threats and privacy at par. I would like to bring out that there are enough comprehensive frameworks available in Indian laws and the IT Act to arrest such negatives. Similar examples are available across the world like the legal formulations in the US and the UK. The European Union is also evolving its own version for a multilateral and multi-nation framework. It may require a full discussion to dwell upon the various dimensions of the legalities in ICT.

Recently, the US had initiated a series of policy measures with their President pushing it past the Congress. There could be lessons for us also. The policy framework needs to address the immediate and futuristic requirements; as the threat is here and now our adversaries, whether state or non-state actors, are already on the job. A national level coordination effort at policy and operational levels is the foundation layer for any cyber security endeavour. India needs a national cyber coordination mechanism for threat assessment. This should have multi-agency participation. Some

efforts in this direction have already been initiated. This endeavour will result in a credible Information scanning framework in coordination with the service providers and industry.

In order to make sense of it all, a comprehensive data analytics capability with mining and fusion mechanisms needs to be put in place for predictive trend analysis. Such skill sets need to be honed with advanced simulation and modelling techniques. A large body of research work already exists in this area which is waiting to be absorbed. While information collection and predictive efforts fall in the pre-event category, measures will require to be put in place for the post-event phase also.

Its time we touch upon the mitigation strategies also. This will involve counter measures and realtime forensics. The mitigation and counter measure aspects need to be handled in a coordinated manner at the national level. We need to prepare a Cyber Security Incident Response Plan and enhance public-private partnerships. While so much needs to be done at the operational level, there exists a very large need for cyber threat awareness, both within and outside the government. There is a need to initiate a national awareness and education campaign to promote Cyber Security. This basic measure needs to be undertaken at multiple levels of society and governance.

National Centre for Critical Information Infrastructure (NCIIPC)

Now I will briefly mention about the NCIIPC. The amendments made to the Information Technology Act in 2008 reflected the nation's recognition of the need to adopt an institutional approach to enhancing our cyber security profile as also to take steady but sure steps towards protection of its critical information infrastructure. The IT Act envisaged the creation of a specialised body to synergise our collective efforts and capabilities to protect the Nation's critical information infrastructure.

Critical sectors as you are all aware, are those sectors whose incapacitation or destruction would have a debilitating impact on national security, economy, public health or safety. Several initiatives have been launched in recent times to enhance our cyber security profile. The creation and activation of the NCIIPC for protection of our critical information infrastructure is one of the important components of this construct.

Conclusion

In conclusion, I may say that Cyber Space offers mind boggling opportunities for improving the quality of life and work but it also provides a threatening landscape for destroying it. There is no escape from Cyber Space or its threats. Society, visionaries, technologists and the Cyber Space 'Subscribee' citizen need to pitch in. Many old paradigms are no longer relevant. New frameworks need to be put in place with no loss of time. The Cyber world is all about speed. We can't afford to be left behind.

* Text of the talk delivered at USI on 10 Apr 2013 with Lieutenant General Prakash Menon, PVSM, AVSM, VSM (Retd), former Commandant National Defence College, New Delhi and presently, Adviser National Security Council Secretariat (NSCS), in the Chair.

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Military diplomacy and Its Employment to Enhance Global Co-Operation against Sub-Conventional Conflicts*

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Introduction

The word 'nation' refers to a community of people who share common language, culture, ethnicity, descent or history.¹ As each nation evolved into a sovereign state, with a centralised government that had supreme independent authority over a geographical area, each state formulated policies for interaction with one another based on strategic and security needs. The salient aspects of inter-state relations are: foreign relations, trade and commerce, cultural, military alliances or cooperation and quite often military confrontation. Last few decades are also characterised by sub-conventional conflicts (SCC) between states which can take the form of externally supported insurgency (proxy war) or state sponsored terrorism. This essay analyses the tenets of military diplomacy and its role in enhancing global cooperation towards preventing I resolving SCC.

Military Diplomacy

Military capability is one of the many determinants that together form 'national power'² and greatly influences the state's international relations. The peaceful employment of military strength in the pursuit of national interests is military diplomacy. During peacetime it prevents coagulation of vectors into conflicts and during war it limits the conflict. With the government spelling out the broad parameters of foreign policy, the continuum of military diplomacy is defined by the tenor of overall relations enabling achievement of right balance of foreign policy and security interests. The present tenor is to move away from insecurity-propelled militaristic approach to security-motivated cooperative approach.

The aim of military diplomacy is to:-

- (a) Reduce security concerns in the region and assist in the fulfilment of foreign policy objectives.
- (b) Bring in greater transparency and confidence in military sphere.
- (c) Build sustained co-operative relationship based on mutual trust and confidence to facilitate conflict prevention.
- (d) Achieve stability of regional and international environment by building and reinforcing perception of common interests.

Military diplomacy as practised by nations today can be broadly classified as 'preventive' and 'coercive' types based on the 'intent'. These are discussed in the succeeding paras.

Preventive Military Diplomacy. Preventive military diplomacy constitutes such military actions which prevent disputes or limit existing disputes from escalating into full blown conflicts and to limit the spread of the latter, when they occur. It aims to achieve confidence, mutually beneficial relationship and favourable security environment through co-operation in the military sphere. Some of the established methods are: defence co-operation, military-to-military contacts, co-operative security and peacekeeping operations. For example, the UN peacekeeping mission in Macedonia (UNPREDEP) in 1995-1999 was the first UN preventive military action.

Coercive Military Diplomacy. Coercive military diplomacy is 'forceful persuasion' or an attempt to get a state or a non-state actor to change its objectionable behaviour through threat or limited use of military force. The aim is to induce an adversary to comply with one's demands or to negotiate, while simultaneously managing the crisis to prevent unwanted military escalation. This is brought into play when all options of preventive diplomacy are exhausted. Military power is its key element and is used in the role of 'compellence' or 'deterrence'.

Modes of Military Diplomacy

Defence Co-operation. It is a sum of mutually beneficial defence related activities aimed at furthering one's national interest through active pursuit of cooperation among friendly nations. Defence co-operation presents equal standing and power to bargain I negotiate for all nations irrespective of their size and might and thus propel nations from their policy of isolation to meaningful engagement. This also enables capacity building, access to new high end technology, material and intellectual pool development, and long term partnership.

Military to Military Co-operation. It is the sum of all military activities aimed at reducing the trust deficit and developing interoperability through direct contact of the military forces. It can be also termed as confidence building measures (CBMs) in the military field.

Co-operative Security. With the steep growth in military technology, sudden expansion in trans-national conflicts and the high cost to maintain peace, many of the technologically and economically weaker nations are moving towards development of committed, long term multilateral co-operative security without compromising their national sovereignty.

Military Training. International Military Training Cooperation (IMTC) is an essential component of peacetime military diplomacy and covers a wide range of training activities. Such cooperation helps to build strategic security relationships with countries and address common security concerns.³

Peacekeeping Operations and Humanitarian Assistance. As peacetime military diplomacy, nations have been committing their armed forces to the UN / regional forums to undertake peace enforcement and humanitarian assistance in war torn areas. This preventive military diplomacy aims at conflict resolution, peacemaking, peace enforcement, recurrence of armed conflict, protection of civilians and assists the nation in rehabilitation I reconstruction.

Coercive Presence. It is the positioning of armed military force to deter an adversary from initiating or continuing an inappropriate action, to signal the intent of using armed force, if necessary. Coercion depends on two factors namely, credibility (whether the target believes that the coercer will execute its threat) and persuasiveness (whether the threat will have a great impact on the target). Some of the methods used are: 'posturing', 'naval blockade' and establishing 'no fly zone' etc. In our own context, Operation Parakram following the terrorist attack on the Indian parliament in Dec 2001 is a case in point.

Relevance

Military diplomacy has quite often been used as a means for international engagement and as a foreign policy tool. Overtime, this has had wider impact on the security of the nation. It furthers international relationships based on mutual trust and confidence. This results in reduction of arm race / stock piling of weapons, opening of borders and markets by nations leading to all round prosperity. Further, military to military contacts enhance transparency and increase interdependence in military matters which could reduce state / non-state sponsored conflicts. However, military diplomacy suffers from a few limitations as it is not formally recognised and is not fully integrated in the foreign policy instruments and continues to stay on the fringes. This lack of understanding coupled with trust deficit prevents nations from fully exploiting the full potential of military diplomacy. States with well established norms are able to utilise the full range of options to further their national interests.

Military diplomacy has been instrumental in achieving peace and stability on global scale. However, changing scenarios provide space for expansion and improvement in the art of military diplomacy, such as :-

- (a) **Strengthening Regional and Global Security Forums.** A large number of security forums presently in force, are not oriented towards enhancing inter-state co-operation for dealing with all facets of SCC. Therefore, there exist a need to augment their charter or develop new regional / global forums to address the growing menace of SCC (with emphasis on terrorism) at their source.
- (b) **Futuristic Weapons of Mass Destruction (WMD) based SCC.** Trends in terrorism indicate that religiously motivated and transnationally linked networks are seeking mass casualties through use of biological and chemical agents. As no commonly accepted international norms to combat WMD terrorism exist; global cooperation, both at political level (for strong counter-measures laws) and military level (diplomacy to discourage states supporting such acts) between nations to combat WMD, are required to be set-up.
- (c) **Economy Driven Military Diplomacy.** Economy drivers such as trade, energy supply lines and conflict free environment would define the national goals and military diplomacy of nations. Co-operative security approach among nations, having common economic drivers, would enhance cost effective and effective security. Therefore, comprehensive military diplomacy for end-to-end security would be the norm in days to come.

Case Study - China

Military Diplomacy. China, as one of the fastest growing Asian country, has made great strides in realising / implementing sound military diplomacy. Since 1997, Peoples Liberation Army (PLA) has made systematic approach to effectively utilise military diplomacy to achieve its national goals. Some aspects of their policies are briefly described below :-

- (a) **Strategic Outlook.** China has engaged in frequent high-level strategic security dialogues, arms sales and military technology transfers to countries with which it has strategic co-operation or which are in areas of potential conflict (African nations and Middle East). China has undertaken major defence cooperation with Russia enabling sale of Russian arms and technologies to the PRC.
- (b) **Regional Outlook.** China through military diplomatic activities with its bordering countries has shaped its regional security environment to its advantage. China has also actively pushed regional security issues in forums such as Shanghai Cooperation Organisation (SCO).
- (c) **Military Exchanges.** China has furthered self projection and knowledge transfer / understanding of operational and tactical doctrines/concepts through elaborate military exchanges and involvement in peacekeeping operations as part of the UN.

Realisation of National Goals. Some positive outcomes from active pursuit of military diplomacy are :-

- (a) Modernisation of PLA with latest technology.
- (b) Resolution of border issues with Russia, North Korea, Kazakhstan, Kyrgyzstan, Tajikistan, Afghanistan, Pakistan, Nepal, Mongolia, Myanmar, Laos and Vietnam.
- (c) Security of its energy flow lines by military diplomatic ties with nations constituting the 'String of Pearls'.
- (d) Larger visibility as a responsible nation in ensuring peace and stability at regional/global levels.

Sub - Conventional Conflicts

SCC are violent engagements involving both military and non-military means, mostly covert in nature and slow acting, and yet affecting the survival of a nation state, a community and society in the long term, which can be either triggered by an adversary state or non-state actors.⁴ Typically these conflicts are above the level of peaceful co-existence and below the threshold of war, and are popularly identified as militancy, insurgency, proxy war and terrorism. Lately, economic and cyber warfare have also emerged as potent security threats.

Based on the idea, that it is possible to destabilise an enemy to such an extent that he will be eventually compelled to concede, despite his ability to continue resisting and to ultimately instill a belief that 'peace / security are not possible without compromise or concession'. Long drawn, these conflicts are characterised by asymmetry in force levels, use of innovative / non-traditional weapons / technologies and are conducted by indigenous / surrogate forces. These covert operations are complex in nature and use of brute force alone does not yield solution but entails co-ordinated efforts of all the instruments of 'national power' for synergised solution to the conflict. SCC are also referred as 'unconventional' or 'asymmetrical' conflicts.

The major contributors for rise of the SCC are: aspiration for independence (LTTE in Sri Lanka), weak and non-functioning state machinery (Maoists in Nepal), social exclusion (Baluchistan in Pakistan), communal hatred (Bosnia), ethnicity (Syria), globalisation and modernisation (African states). Overtime, SCC have evolved into multiple forms due to varied causes for their initiation; such as: terrorism, insurgency, super terrorism, proxy war, economic and cyber warfare. A combination of various factors; such as, economic loss in case of full fledged war, growing aspirations of individuals for independence, failure of state machinery in uplifting the society, growing religious intolerance and easy availability of arms have led to sudden rise in SCC.

Resolution of SCC

Challenges. The difficulties in dealing with SCC begin with its very nature - it defies the principles, logic and technological aspects of conventional warfare. Some of the challenges in addressing these conflicts are:-

- (a) **Restraint in Retaliation.** The sub-conventional warfare differs in respect to application of fire power by the armed forces. Severe restraints are imposed on the soldiers in SCC because of political ramifications and human rights issues.
- (b) **Winning of Hearts and Mind.** SCC also encompass an internal discontent within a nation, and hence a certain degree of restraint must be imposed. Indiscriminate violence on the part of military against indigenous population will do little towards winning their hearts and minds.
- (c) **Formulation of Response.** One of the difficulties encountered with respect to formulating responses to unconventional conflict is that they all differ in some respects. Though generalisations can be formulated about such conflicts, the circumstances that surround the origins of a particular conflict are never exactly replicated in other conflicts. Hence, each conflict needs to be looked at differently for finding a lasting solution.
- (d) **Global Phenomenon and Collective Action.** Terrorism is a global phenomenon, with no definition and limits to the use of imagination in perpetuating acts of terrorism. The cross border nature of these conflicts, can't be tackled by one country in isolation and requires collective approach on various fronts. Thus, capability and capacity building are imperative, as also the nations' ability to dissuade, deter and disarm the adversary.
- (e) **Stress on Soldiers and Need for Additional Training.** Soldiers operating in SCC environment are subjected to high levels of stress and also require specialised training to handle anti national elements.

Channels for Resolution. The nature of SCC has been such that 'instant' resolution through application of force has never been successful. In fact, it can be counter-productive. Each conflict requires multi-pronged approach by all elements of national power. A few measures recommended for resolution are :-

- (a) **Political and Co-operative Approach.** This approach involves understanding and negotiating with the perceived oppressed by encouraging political solutions within the ambit of the Constitution. As the process of reconciliation is long, the state would require the 'will' and perseverance in establishing its legitimacy and gaining public faith. The military plays a supporting role in establishing the government's supremacy by using the 'principle of minimum force'. International co-operation through military diplomacy and intelligence sharing would be essential in preventing the flow of arms, ammunition and funds from foreign sources.
- (b) **Military Approach.** This approach involves the use of full military might in establishing the law of the land. This approach has been successful in certain set-ups such as China and Sri Lanka. Severe violation of human rights, curbs on mass media and widespread violence / prosecution marks such approach.

Military Diplomacy as Solution for SCC

The SCC no doubt has caught the attention of all nations, post - 11 Sep 2001. The idea of 'thousand hurting cuts' through these conflicts, needs to be addressed with all means. The effectiveness of military diplomacy in dealing with this menace is analysed in succeeding paragraphs.

Can SCC be resolved through Global Cooperation? Due to the complex nature and trans-national characteristics, resolution of SCC by a single nation appears impossible. Inter-state co-operation at all levels, is the way ahead for dealing with SCC. A positive security environment implies that no inimical activities against one's nation are planned and undertaken from another. Therefore, engagement in regional/global co-operation would create mutually beneficial environment based on trust and commitment which could catalyse further growth / interdependence in areas of

common interest among states. Therefore, co-operation in development of collective resilience would be result oriented and cost effective against SCC.

Can Military Diplomacy enhance Global Co-operation? Military diplomacy achieved through agreements, dialogues, military-to-military contact and technical cooperation between states aims to create a stable and peaceful security environment essential for economic growth and development. As a win-win situation, military diplomacy is mutually beneficial as it enhances defence capability, opens channel for availability of high end technology and establish secure channels of trade / energy for the participants. Hence, military diplomacy promotes regional/global cooperation which is the basic requirement for states to maintain healthy international relationships.

Military Diplomacy - An Effective Technique. The efficacy of military diplomacy in developing global cooperation is well understood, as seen by the growing number of nations involved in bilateral/multilateral military relations. Global cooperation is the only available tool for efficient resolution of SCC.

Afghanistan Example. On 11 Sep 2001, terrorist linked to Al Qaeda network rammed hijacked aircraft into twin towers of the World Trade Centre in New York City. Operation Enduring Freedom began on 7 October 2001, towards which 36 states offered military contingents / equipment and 44 states opened their airspace. The use of wide-ranging tools such as political, financial and military, made available by the broad coalition had a decisive impact. Further, use of military diplomatic tools by the USA such as military aid and coercive techniques has enabled it to sustain the war against terrorism in Afghanistan. This conflict greatly emphasises the relevance of cooperative approach when dealing with SCC.

Strengthening Military Diplomacy

The SCC are required to be addressed by all components of national power. Established diplomatic tools which have been traditionally involved in resolution of conflicts need to be synergised with military diplomacy, to attain better response in the fight against sub-conventional threats. Some of the requirements are discussed in succeeding paragraphs.

Synergising Military Diplomacy with Conventional Diplomacy. Career diplomats are the main actors in the conduct of international relations. The integration of global economy has not only resulted in 'interdependence' but also in proliferation of problems. As a large number of these problems have security implications, there is a need to synergise the efforts of armed forces with the efforts of career diplomats. Some of the modalities for this integration are:-

- (a) Development of strong ties between various ministries and agencies, so that a cohesive approach in identifying and addressing security issues (setting aside the turf wars) can be achieved.
- (b) Deputing defence personnel to various diplomatic assignments for closer interaction and feedbacks, and vice versa.
- (c) Diplomats through their networks should coordinate availability of credible early warnings on security related matters to the military.
- (d) Periodic interaction through meetings / seminars between diplomats and military to identify bottlenecks and opportunities for enhanced cooperation.

Synergising Military Diplomacy with other Diplomatic Actors. The expanding realm of trans-national relations has added new layers of diplomacy. States no longer are the only actors in international processes. Non Governmental Organisations (NGOs), Multi National Corporations (MNCs), Non-Governmental Elite and Media are undertaking transnational activities at the margins of government activity as follows : -

- (a) **NGOs.** Due to their impartial and humanitarian mediation, NGOs have been actively involved in implementation of conflict resolution agreements such as disarming of militias and facilitating return of refugees. For example, International Committee of Red Cross (ICRC) and International Campaign to Ban Landmine (ICBL) achieved banning of antipersonnel mines in 1997.5 Further, as NGOs are less intrusive and have grass root connections, they have been giving early warnings of impending conflicts, i.e. preventive diplomacy.
- (b) **Eminent Individuals.** They are the people who come together to advance the interests they hold in common and are at the heart of transnational activity. This type of diplomatic work is more widely acknowledged today as 'Track II Diplomacy'.
- (c) **International Organisations.** These organisations were established to undertake specialised tasks or to administer international projects. Each member nation of the organisation is represented to defend national interests and cope with interdependence / problems facing international society, e.g. the UN, World bank, International Monetary Fund etc.
- (d) Some areas where integration of armed forces with the above actors could be synergised are :-
 - (i) Early warning mechanism by NGOs to armed forces.
 - (ii) Creation of public support for military actions.
 - (iii) Creation of international opinion against proliferation of WMD and terrorism.
 - (iv) To facilitate disarming of various armed groups and peace building.

Synergise Military Diplomacy with Mass Media. The media is another factor of growing importance in international negotiations. Effective links between the military and the media would provide opportunity to prevent misinformation campaign, test ideas and policy alternatives as also building informed public opinion on military related issues.

Use of Military Diplomacy in SCC by India

SCC Environment. Lack of political will to consolidate national interest and ambiguous national policy on conflict resolutions has resulted in large number of SCC prone areas in India. The northeast Indian states are facing SCC due to unresolved ethnic issues and influx of outsiders. Kashmir has been central to terrorism in India due to proxy war being sponsored by Pakistan. Naxalism has spread into nearly six states namely; Andhra Pradesh, Maharashtra, Chhattisgarh, Madhya Pradesh, Bihar and Orissa. It has become a most serious internal security threat.

In the neighbourhood, both Pakistan and Afghanistan are at the centre of terrorism and have unstable political systems. The radicalisation of the domestic environment and the continuous inflow of illegal immigrants into India, cross-border movement of insurgents from Bangladesh and Myanmar are issues which have security ramifications for India. The political instability in Nepal could become a breeding ground for terrorism and pose serious security threats. The relations between India and China continue to be affected by the lingering border dispute.

Military Diplomacy. The apex organisation for military diplomacy in India is the National Security Council (NSC) assisted by the Strategic Planning Group (SPG). International relations are handled by the MEA (in consultations with MoD) with separate divisions for each country. The MoD and the three Services have separate departments for coordination of military diplomacy.⁶ India has Defence Attaches (DAs) in 34 foreign countries and 43 foreign DAs are located in India. The effectiveness of Indian approach can be evaluated as under : -

(a) **Positives.** The Indian approach has often been reasonably effective and in sync with the national foreign policy. India has strengthened its bilateral ties with bordering countries, Indian Ocean Region (IOR) and the Association of Southeast Asian Nations (ASEAN). India has also been at the forefront of undertaking humanitarian efforts during natural calamities. It is also involved in co-operative efforts to guard the Sea Lanes of Communication (SLOC) and training of foreign military personnel. India has also been involved in joint bilateral military exercises. India's defence industry is trying to get a foothold in the huge defence related market.

(b) **Negatives.** However, a lot needs to be done by India to catch up with the growing pace of world scenarios. India has no concept or policy for employment of military diplomacy as a foreign policy tool. Organisationally, there is lack of institutionalised mechanism to conduct military diplomacy. The three Service Headquarters are in no way involved with the decision making, both in MEA and MoD, despite being the main actors on the ground. Delay in creating the appointment of CDS is resulting in piecemeal approach by the three Services. Various departments involved in the formulation of military diplomacy are understaffed. There is no separate financial head for funding the defence cooperation activities. Despite the growing contact of India with foreign countries, only 34 DAs have been sanctioned. India is failing to leverage its military diplomacy with neighbouring countries to prevent the cross-border support for organisations in India fomenting insurgencies and instability in India.

Therefore, in view of the above, there exists a need to change India's outlook towards military diplomacy to further its national interests. The two proposed models are brought out in the succeeding paragraphs.

Model I - Graduated Enhancement Approach (GEA). This Model is aimed at enhancing the present structure of conducting military diplomacy, so as to progressively move to a better and efficient system, and thus effectively control SCC. This can be achieved as follows:-

(a) **Core Policy.** Presently there exists no core policy for conduct of military diplomacy. Defining of the Core Policy on military diplomacy in line with the National Security Strategy and Foreign Policy, would provide guidelines for all levels to plan and execute military diplomacy. Taking cue from this policy, each of the three Services can draw up their plans to meet national objectives.

(b) **Institutionalisation of Military Diplomacy.** The bureaucracy at MEA and MoD do not allow its turf to be encroached upon by the Armed Forces. Therefore, institutionalisation of the procedure, with enough room to cater for the growing security needs, is required. The concerns and needs of the Defence Forces should be factored in at every level of decision making.

(c) **Streamlining of the Organisational Structure.** Despite the present organisational set-up consisting of the MEA, MoD and the three Service Headquarters, there exist grey areas of responsibilities, resulting in unclear and delayed procedures. A well defined organisational structure with cross linkages and financial powers needs to be established and maintained.

(d) **Acquisition Policy.** With the military diplomacy clearly defined, the three Services should accordingly plan development / procurement of arms to meet the requirements of military diplomacy. The power projection capability needs to be compatible with the core national policy.

(e) **Institutional Measures.** Building organisations and legal measures on security related issues, through arms control accords and treaties to control terrorism and WMD (in the IOR) would enable various nations to come on even ground to control development of threats. These measures, have the greatest potential of de-escalating inter-state and intra-state insecurities.

(f) **Staffing.** The results, achieved through military diplomacy would depend on the quality and quantity of staff provided at every level for planning and executing National policy decisions. With growing international

relations, India has to identify more countries where DAs are required to be positioned, along with adequate supporting staff. This staff must be adequately trained to handle diplomatic assignments.

(g) **Training in Diplomacy of Military Officers.** Diplomacy must enter the syllabi of our military academies. Trained military officers must be deputed to Indian embassies and missions around the world, both, to add to the numbers of DAs as well as to perform non-military functions. Not only will this expose military officers to the nuances of diplomacy; furthermore, the socialisation of defence and foreign service officers through such postings will create benefits in the long term, in terms of greater understanding and policy coordination.

Model II - Integrated Systemic Approach (ISA). This system aims at revamping the existing structure so that all factors having bearing on the military diplomacy of a nation are involved in its formulation through collective responsibility. A greater degree of freedom in terms of responsibilities and financial power is also proposed as shown in Figure 1. This system would enhance the conduct of military diplomacy and also achieve effective resolution of SCC in India.

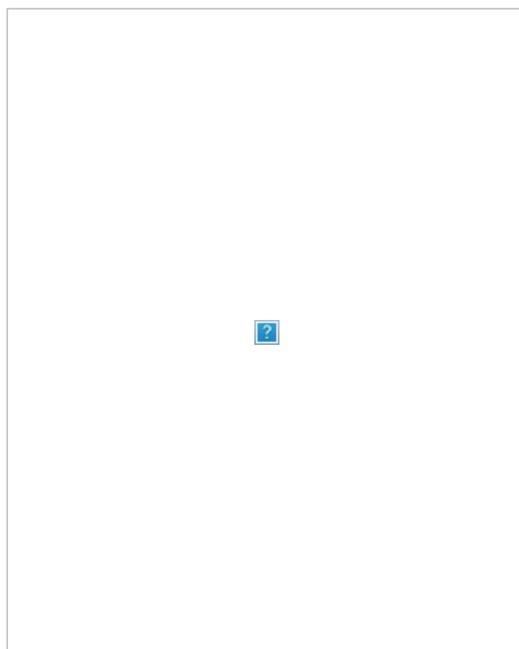


Figure 1: Integrated Systemic Approach

Model II consists of the following main features : -

- (a) **Core National Policy.** The core National Policy is required to be well defined. From this policy, the Foreign Policy is derived. Towards formulation of these policies inputs from MEA, MoD (including Service HQ), Commerce Ministry (for economic requirements), Home Ministry (for internal security conditions), Intelligence Agencies (for emerging internal and external security conditions) and Centre of Excellence (for inputs on new security developments) are taken towards arriving at a comprehensive policy.
- (b) **Military diplomacy Guidelines.** Well defined guidelines on military diplomacy are derived from the foreign policy and serves as the template for undertaking all military diplomacy activities.
- (c) **Responsibilities of MEA and MoD.** From the military diplomacy guidelines, well defined structure and responsibilities towards undertaking military diplomacy are specified to prevent any grey areas. Each level should be delegated financial powers.
- (d) **Chief of Defence Staff (CDS).** Appointment of CDS, so that he becomes the single point contact for MoD. This will result in synergised military diplomacy activities by all the three Services.
- (e) **Feedback Mechanism.** Feedback mechanism be incorporated into the organisation to measure the effectiveness of the military diplomacy activity. the feedback could be obtained in terms of increase in economic activity, reduction in SCC in targeted areas, increase in arms sale etc.
- (f) **Concept of Theatre Commander.** Theatre Commanders of the rank of General/Admiral/Air Chief Marshal could be appointed under the Integrated Defence Staff (IDS). Each Theatre Commander would be responsible for drawing out military diplomacy plans (in line with the foreign policy) in respect of countries falling under his theatre and ensuring its implementation post approval. This would provide the Services more control on the planned military diplomacy activities.
- (g) **Indian Defence Related Industry.** Growth in indigenous defence industry would give a great boost to the quality of military diplomacy undertaken by India. Long term material dependence can be generated by providing Indian equipment as part of military diplomacy.
- (h) **Identify Core Issues of Military Diplomacy.** Issues such as 'resolving of border disputes', 'tackling of terrorism', 'power projection and trust building through military diplomacy' and 'concept study on new methods of

military diplomacy' need sustained focus and efforts.

(j) **Other aspects** as proposed in Model I are also relevant.

Conclusion

In the next 20-25 years, as India enters a crucial phase of economic growth, the Defence Forces will have a critical role to play in maintaining a peaceful strategic environment in its neighbourhood and ensuring unhindered economic growth. Therefore, it is imperative that the relevance of 'military diplomacy' be recognised and suitably intertwined with national goals for security and prosperity of our nation.

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The Sri-Lankan Experience in the Use of Air Power against the LTTE in Subduing the Maoists Insurgency

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Introduction

Sri Lanka experienced a long civil war borne out of ethnic strife between two communities, the Tamils and Sinhalese. Through the 1960s, various Tamil groups started demanding a separate Tamil state or Eelam. This led to the formation of various outfits such as the Tamil Eelam Liberation Organisation (TELO), TULF (Tamil United Liberation Front), Eelam People's Revolutionary Liberation Front (EPRLF) and TNT (Tamil New Tigers) which later metamorphosed into the well-known Liberation Tigers of Tamil Eelam (LTTE). The LTTE was formed on 5 May 1976, under the leadership of Velupillai Prabhakaran. It was one of the most lethal, controlled and disciplined terrorist organisation in the world. The main aim of the LTTE was to create a separate homeland for the Tamils known as the Tamil Eelam (State) in the Northern and Eastern provinces of Sri Lanka. The LTTE was organised along a two-tier structure: a military wing and a political wing which was subordinate to the military wing. A central governing committee, headed by the LTTE chief, Velupillai Prabhakaran was the overall head of both wings. The LTTE had its own military, air and naval wings.

The civil war raged from 1983 when the "First Eelam War" as called by the LTTE started, till 2009 when the Sri Lankan armed forces were able to defeat the LTTE.¹ In comparison, in India, the Maoist insurgency which is being experienced in numerous states is not classified as a civil war – but a law and order problem as of now. The commonality between these two conflicts is that both conflicts are internal conflicts involving their citizens who are aggrieved, and there is and was a use of armed force by both sides.

The degree to which force is being applied in the Indian context is much lesser than in the Sri Lankan case as the Maoists have not yet been able to muster an army as well equipped as the LTTE. The Indian armed forces are still to be directly involved in the insurgency operations. At present, they are only supporting the Central and State police forces. The Sri Lankan armed forces launched numerous operations against the LTTE, employing all its forces.

Air Power was also used during the Sri Lankan civil war, not only by the Sri Lankan Air Force (SLAF) but was also employed by the IPKF (Indian Peace Keeping Force) from 29 July 1987 to 24 March 1990, when the Indian Air Force formed a part of the IPKF operations in Sri Lanka. The IPKF was inducted into Sri Lanka as mandated by the Indo-Sri Lankan Accord of 1987. The role of the IPKF slowly changed from peace keeping to peace enforcement. It would, therefore, be best to understand how Air Power was utilised by both countries in Sri Lanka and see whether there are any lessons which can be drawn for utilising Air Power against the Maoists in India.

Air Power in Sri Lanka

The main aircraft which participated in the IPKF operations were Antonov AN-32s, Mi-8 and Mi-25 helicopters, Indian Army and Navy Chetaks and Cheetahs and the Indian Navy Alize aircraft. The first action carried out by the IAF was during Operation Poomalai in which five AN 32 aircraft, escorted by Mirage 2000 fighters dropped food supplies to the besieged Tamils of northern Jaffna. During this operation, AN-32 aircraft maintained a continuous air link from air bases in Southern India to Sri Lanka, transporting men, equipment, rations and evacuating casualties on the outbound flights.² Helicopters were used to support the Indian Army in their operations and formed a lifeline for the field forces as well as providing air transportation to Sri Lankan civil administration during the elections. Mi-25s were utilised to provide suppressive fire against LTTE strong points and to interdict coastal and clandestine riverine traffic.³

The SLAF supported the Sri Lanka Army (SLA) by providing them with logistic and close air support – flying intelligence, surveillance / reconnaissance, search and rescue missions and access to denied areas.⁴ It also carried out extensive bombing of the LTTE training camps, Sea Tiger bases and vessels and communication towers.⁵ The SLAF also supported the SLA in numerous joint operations by bombing LTTE positions. In 1997, the SLAF flew over 20,000 hours operationally, logging 21,895 hours. From May 1997 to 1999, the SLAF participated in Operation Jayasikurui in which Kfir jets flew 232 missions, MI-24 attack helicopters flew 127 missions and the Pucaras counterinsurgency ground attack aircraft flew 13 missions.⁶ Other aircraft which participated in the war were the Chinese Yun-12 turboprop transport aircraft equipped with bomb racks that had been fitted to carry up to 1,000 kilograms of fragmentation and anti-personnel bombs, Bell helicopters and MI 24 attack helicopters. The important lessons learnt in utilising Air Power by both countries against the LTTE are enumerated in the succeeding paragraphs.

Political will is paramount for exploiting Air Power gainfully. In any internal conflict, the use of Air Power is always restricted by political will. During the early years of Operation Pawan, the use of offensive Air Power was restrained to ensure no civilian casualties. However, with an increase in the aggressiveness by the LTTE, armed helicopters were inducted into the battle. It was only after an escalation in the belligerence of the LTTE in 2005 that the Sri Lankan government permitted Air Power to be used more offensively and even purchased offensive air platforms such as the Mi-24 attack helicopter, MiG-27 fighter and Kfir aircraft for employment against the LTTE.

Joint planning and briefing are a pre-requisite for the success of any joint operation. The Jaffna University Heliborne Operation (11 and 12 October 1987) was one of the major joint operations conducted by the army and air force elements of the IPKF. It would appear that adequate joint planning and briefing were not carried out prior to the Jaffna operation. There was even an ambiguity in the landing zone planned and marked on maps.⁷

Induction of troops is fastest when air assets are employed. In a bid to augment troops in Sri Lanka, in just two days (15 and 16 October 1987) three brigades and heavy equipment, including T-72 tanks and BMP-1 infantry combat vehicles were airlifted into Sri Lanka. As per estimates from 11 to 31 October 1987, 2,200 tactical transport and 800 assault helicopter sorties were carried out towards inducting troops, weapons, vehicles, stores and various other equipment into Sri Lanka by the IAF.⁸

Air effort available should be commensurate with the planned task. The Jaffna Operation required four MI-8

helicopters to transport 480 troops with a restriction of only 20 troops per lift. The time estimated to induct this force was over one hour. The air effort provided was insufficient to transport the troops so as to ensure that they could concentrate in force and be self-supporting, thereby being able to be effective in battle.⁹

Air assets must have some kind of fire capability when participating in hostile territory. In the Jaffna operation, self-defence and offensive capability was sacrificed by the MI-8s to ensure that the maximum number of troops could be carried in every sortie. No armament was carried by the MI-8 helicopters even though rockets were available in sufficient numbers. Thus the helicopters were unable to return fire when they came under heavy ground fire.¹⁰

Helicopters need aerial protection during landing and take-off phases. The helicopters came under heavy ground fire during this operation. In subsequent operations, MI-25 helicopters were utilised to provide escort to heliborne operations and also lay down suppressive fire. This tactic was gainfully used while landing at remote unreconnoiled landing zones.

Secure communication ensures surprise and secrecy of plans. The LTTE had been forewarned regarding the Jaffna raid by the IPKF by VHF Radio interception and were prepared for the raid.

Aerial surveillance and reconnaissance provides valuable intelligence. Inputs from photo reconnaissance missions were able to provide valuable intelligence for the conduct of ground operations. Aerial photo mosaics were used for planning operations as no other accurate maps were available.¹¹ During the Jaffna University operations, one of the major reasons for its failure was the lack of intelligence regarding the strength of the LTTE.¹² This could have been overcome by continuous aerial surveillance.

Adversary's Air Defence threats should not be ignored. The SLAF lost a number of aircraft to SAM-7s used by the LTTE. They lost two HS-748, two AN-32 and one Y-8 aircraft. These attacks on the SLAF led to the irreplaceable loss of 95 personnel on board the aircraft which included 15 pilots and nine Flight Engineers.

Air assets are vulnerable to attack on ground and need to be protected. The SLAF lost one Y-12, two Kfir, three K-8, one MiG-27 aircraft and two Mi-17 helicopters when they were destroyed by LTTE raids on air bases.¹³

Air Power has a tremendous psychological effect on ground forces. Offensive air support provided by attack helicopters had a tremendous positive psychological effect on the ground forces, while it intimidated the LTTE. Escorts provided by attack helicopters to MI-8 helicopters, landing troops at remote helipads, was morale boosting. On the other hand, the success of LTTE ground raids in destroying SLAF aircraft coupled with the shooting down of SLAF aircraft was a reason for low morale of SLAF personnel.¹⁴

The Maoist Insurgency and Air Power

The Maoist insurgency, although has some commonality with the civil war of Sri Lanka, it is mainly different with respect to the level of fire power being used by the Naxals and the Security Forces. The relevant lessons that can be gleaned from the Sri Lankan experience regarding the use of Air Power and applied in the Indian context in subduing this insurgency are brought out in subsequent paragraphs.

Political Will. The Government of India was initially not inclined to use Air Power against the insurgency. The Home Minister of India had remarked, "At present there is no mandate to use the air force or any aircraft. But, if necessary, we will have to revisit the mandate to make some changes."¹⁵ As of now, the Cabinet Committee on Security headed by the Prime Minister has cleared the use of these helicopters only for casualty evacuation, troop mobility and other logistic roles. Helicopters have not been permitted to be used in the offensive role. With the insurgents becoming more offensive and bold, there is a need to revisit this mandate again and use Air Power more offensively in a pre-planned and controlled manner to ensure minimal civilian casualties.

Quantum of Air Effort. Operation Triveni initially started with two Mi-17 helicopters, increasing to six.¹⁶ This operation was initially conceived to cover Chhattisgarh, Maharashtra and Andhra Pradesh, and has recently been broadened to include Odisha, Bengal, Jharkhand, Bihar and Madhya Pradesh.¹⁷ Till 31 March 2012, a total of 2492 hours in 3602 sorties had been flown in support of anti-Naxal operations,¹⁸ working out to an average of just 25 hours per helicopter, per month. This paucity of air effort is magnified with the poor serviceability state of BSF helicopters. Presently, the Dhruv helicopters of the BSF have been grounded owing to various maintenance related problems, while its Mi-17 fleet of six helicopters also has a poor serviceability rate due to the unavailability of spares.¹⁹ Six IAF helicopters are required to provide air support to nine states, a ratio which speaks for itself. Hence, the employment of Air Power in anti-Naxal operations is negligible as compared to the effort which is required. Employment of air assets is superficial. Air operations in support of the ground forces need to be quantitatively increased.

Protection of Air Assets on Ground. Anti-Naxal air operations are undertaken from civil airfields and also from CRPF camps. Though our security forces are proficient and fully prepared in protecting air assets on ground, it would be prudent in not over-estimating our own capabilities while underestimating the will and determination of the Maoists. Air bases in states affected by the insurgency need to be protected from a suicidal ground attack by the Maoists.

Protection of Helicopters. In the past, the Maoists have shot at helicopters flying in support of the security forces. ²⁰ In the latest incident on 18 January 2013, the Maoists were successful in shooting an Air Force MI-17 helicopter, forcing it to land. Rules of Engagement permit the IAF to retaliate, but only in self-defence. For this, the Mi-17 helicopters have been modified with sideways firing machine guns. This gun is manned by a trained Garud commandos of the IAF. Even though the insurgents have fired on IAF helicopters, the question that needs to be answered is: How many times were the Garuds able to return fire in self-defence? The task given to the security forces of sanitising helipads is easier said than done, as has been the experience in the past. The solution may lie in providing another helicopter to fly as an escort and if required lay down suppressive fire to deter the Maoists from taking pot shots at

helicopters in the final phases of arrival or departure.

Air Defence Threat. Anticipating the use of Air Power, the insurgents have trained their cadres in aspects of air defence. They have mastered facets of passive air defence and are also training for active air defence. The Maoists' air defence syllabus includes passive air defence topics on camouflage and concealment, dispersal techniques, targeting aircraft with LMGs, small weapons, etc. They have been trained for firing against a moving airborne target, evident from the attacks on Indian Air Force helicopters. Though the Maoists have not fired at the helicopters with rockets yet, intelligence inputs indicate that they are in possession of a crude rocket which may be used in the future with much more devastating results than machine gun fire. This threat from the Maoists brings out the importance of protecting our airborne assets.

Conclusion

In the past, Air Power has been used extensively to quell insurgencies. The British used Air Power in Malaya in 1945 while the French used it in Algeria in 1954. The Sri Lankan experience of using Air Power in its ethnic civil war has lessons for India. If Air Power is to be used against the insurgents; public opinion has to be moulded, about how Air Power is supporting the ground forces and ensuring that it is assisting in reducing the casualty rate of the ground forces. If public opinion can be correctly moulded, then numerous avenues for the use of Air Power would open up to the Government.

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PLA's Modernisation of its Strategic Forces and Implications for India

Colonel GG Pamidi*

Introduction

To the uninitiated, China and India are similar when it comes to nuclear weapons and the manner in which they view these weapons. China maintains that it detests nuclear weapons and that they are inhumane. It argues that because the US and the former Soviet Union were both building large nuclear arsenals during the Cold War and because, or so the argument goes in the Chinese perceptive, these two former super powers used nuclear weapons to coerce non-nuclear states, it was argued that China had no choice but to pursue nuclear weapons itself.

China maintained that it would prefer to see nuclear weapons abolished rather than maintain its own arsenal. India too, it is argued, is a reluctant nuclear power and has been compelled to become a nuclear power because of powerful and compelling security considerations. This article examines if this is indeed true and, if not, what is the underlying logic of the nuclear weapons of China. Why has China embarked on an ambitious modernisation programme of its strategic forces and more importantly, what does this portend for India?

Layout

This article is laid out as under:-

- (a) Examining the Moral High Ground of Chinese Nuclear Programme in light of the Modernisation of Chinese Strategic Forces and Force Posture.
- (b) External and Internal Factors driving the Changes in China's Nuclear Modernisation and Force Posture
- (c) Implications for India.

The Modernisation of PLA's Strategic Forces and Force Posture

Prior to analysing the modernisation of the PLA's Strategic Forces and its force structure, it is important to first examine the reality behind the moral high ground argument and rationale of its nuclear weapons.

The Moral High Ground of Chinese Nuclear Programme

Having established itself as a nuclear power in the mid-1960s, China declared that:-

- (a) It had adopted a "No First Use" policy.
- (b) Strategic weapons would only be used in retaliatory counter attacks.
- (c) It also promised never to use nuclear weapons against non-nuclear states.

In addition, China has long maintained a doctrine of minimum deterrence. This posture required that China maintain a small force of intercontinental ballistic missiles (ICBMs), only a few of which are needed to survive a nuclear attack. For minimum deterrence to be effective, all that was needed was a small, survivable arsenal, which is essentially what China has maintained all along.

However, from the declassification of the US documents which are now available, coupled with the confessions of the now disgraced Pakistani scientist AQ Khan, it is clear that China played a pivotal role in the Pakistani and Iranian nuclear programmes. It appears that China sees a use for these weapons other than simple self-defence. Though China appears to have halted its proliferation activities, these past activities suggest a more well thought out strategy towards nuclear weapons than one of moral abhorrence.

The Modernisation of Strategic Forces and Posture

China's movement towards an increased reliance on nuclear weapons and shifts in its nuclear doctrine are not surprising but potentially of great concern. While China has been adding more weapons to its nuclear arsenal and fielding new ballistic missiles and ballistic missile submarines, Chinese strategists have been engaged in doctrinal debates over how these weapons should be used. As a younger generation of military thinkers has come to the fore, the long-held tenets of China's nuclear doctrine as originally set forth under Mao; namely, the "No First Use" policy and minimum deterrence are increasingly coming under scrutiny. Indeed, some strategists argue that China should cast these policies aside and adopt a new nuclear doctrine that will grant strategic forces a more prominent role in the country's defence.

Though officially China appears to adhere to a doctrine of minimum deterrence, there is evidence to suggest that, in recent decades, China has moved or is moving to a limited deterrence nuclear doctrine. In 1995, Alastair Iain Johnston argued that in post-Cold War China, there had been "more comprehensive and consistent doctrinal arguments in favor of developing a limited flexible response capability.¹" In limited deterrence, nuclear weapons play a critical role in the deterrence of both conventional and nuclear wars as well as in escalation control (intrawar deterrence), if deterrence fails. In other words, nuclear weapons have a wider utility than proponents of minimum deterrence would suggest.² If China has adopted a doctrine of limited deterrence, then, this implies that China would use its nuclear weapons not only to deter nuclear attack on itself but, if necessary, to fight and win a nuclear war or, if not win, to at least deny victory to an adversary.

For the first few decades of the PRC's existence, the PLA maintained a doctrine of "People's War." The PLA

would make use of China's greatest resources; its large population and strategic depth to defeat a superior enemy on Chinese territory. The PLA now plans to fight "localised wars under conditions of informationisation". Given the Chinese government assertions that its nuclear capability "is solely for self-defence with a view to maintaining independence, sovereignty and territorial integrity,"³ it is quite possible that China may be tempted to use nuclear weapons to prevent an adversary from seizing territory, which the Chinese claim, is their own.

External Factors

The US Threat

From China's point of view, the US is the number one threat. China perceives that the US can challenge all of its three core interests: regime survival, sovereignty and territorial integrity, and continued economic growth.

- (a) **Regime Survival.** It is no secret that the US would like to see political liberalisation in China. Indeed, this has long been used as a justification for trading with the PRC.
- (b) **Sovereignty and Territorial Integrity.** There are historical reasons for this concern, as the CIA supported separatists in Tibet during the Cold War. In the present day, the US provides a home for Rebiya Kadeer, Xinjiang's leading activist, and has honoured the Dalai Lama.
- (c) **Economic Prosperity.** The US is China's largest trading partner and the US dominates the Sea Lines of Communications (SLOCs). Should Sino-US tensions spike or conflict breakout, the US is able to not only cut-off its own trade with China, but can also impede the flow of oil and other natural resources to China by blocking the SLOCs.

China's growing medium-range ballistic missile threat to America's Pacific bases may force the US to rely on long-range assets for conventional deterrence. China may find this destabilising and may rely on its nuclear arsenal to deter America's use of long-range weaponry. China's fears that its second strike capability would be threatened and thus its deterrent capabilities would get undermined.⁴

Emerging Nuclear Weapon States

Japan, Taiwan and South Korea are "emerging" or "threshold" states. All have previously had nuclear weapons development programmes in the past and can resume them relatively easily should they feel threatened.⁵

Japan.

- (a) Today, Japan's nuclear energy infrastructure makes it eminently capable of constructing nuclear weapons at will.
- (b) De-militarisation of Japan and the US nuclear umbrella have led to a policy of non-weaponisation of nuclear technology, but in the face of nuclear weapons testing by North Korea, some politicians and retired military officers in Japan are calling for a reversal of this policy.⁶
- (c) As China's military continues to grow, Japan will find it increasingly difficult to defend itself with conventional forces, especially if the US drawdowns its own forces in the region.
- (d) A China that is prepared to use nuclear weapons against US forces in Japan or a China that poses an overwhelming conventional threat to the islands will make nuclear forces a much more attractive option for Tokyo.

Taiwan.

- (a) Taiwan does not have nuclear weapons. However, Taiwan had made attempts to organise production of plutonium on an experimental basis.
- (b) Taiwan had launched a nuclear weapons programme after the first Chinese nuclear test in October 1964. By 1974, the US Central Intelligence Agency concluded that "Taipei conducts its small nuclear programme with a weapon option clearly in mind, and it will be in a position to fabricate a nuclear device after five years or so."
- (c) The US intelligence believed that Taiwan also had designed devices suitable for nuclear testing.⁷ With tensions in PRC - Taiwan relations, the possibility that Taiwan could make another attempt to breakout of the nonproliferation regime remains a concern.

South Korea.

- (a) South Korea is said to have first begun its nuclear weapons programme in 1970, in response to the Nixon Doctrine's emphasis on self defence for Asian allies.⁸
- (b) South Korea may have had plans in the 1980s to develop nuclear weapons to deter an attack by the North.⁹ The plans were reported to have been dropped under US pressure.
- (c) Though it was reported in August 2004 that South Korea had conducted highly secretive and sensitive nuclear research programmes over a twenty year period, the IAEA, in a report issued on 11 November 2004, described the South Korean government's failure to report its nuclear activities a matter of 'serious concern', but accepted that these experiments never produced more than very small amounts of weapon grade fissile material.¹⁰
- (d) The US maintains a ban on plutonium being supplied to the South Korea.¹¹

Internal Factors

Economic Challenges.

- (a) In early March 2012, China released its defence budget. Chinese military expenditure will increase by 11.2 per cent over 2011 figures, and it breached the symbolic 100 billion mark for the first time.
- (b) China's defence budget, on an average, has risen by 13 per cent per annum over the last fifteen years and it has grown over 500 times the expenditure it incurred in 1997¹².
- (c) However, internally, the growth has been skewed with large parts of China's hinterland remaining still grossly underdeveloped and neglected, with the attention focused primarily on areas close to the coast.

Demographic Challenges. A number of demographic trends are interacting to create an unfavorable environment for the PLA. Some of these are :-

- (a) The labour force (aged 15-64) will peak around 2015 and then begin to shrink. Meanwhile, the population of people aged 0-14 and 15-24 is already shrinking.¹³
- (b) First of all, the 4-2-1 population structure (four grandparents, two parents, one child) in combination with the under-funded pension system will make PLA volunteers harder to come by and retention more difficult, as the single child will feel pressure to adequately care for his/her elders.
- (c) Twenty three per cent of the Chinese population will be elderly in 2050, at which point the official dependency ratio (the number of elders per 100 individuals 15-64 years of age) will be thirty eight.¹⁴
- (d) The shrinking population of people aged 0-14 and 15-24 means that the PLA's recruitment pool is shrinking as well.

Possible Response to External Factors

- (a) First, China may respond to the external factors by attempting to give further impetus to its nuclear modernisation programme because of what it perceives are real security threats.
- (b) China's build-up of short and medium-range ballistic and cruise missiles may also, inadvertently, impact its nuclear doctrine. These missiles threaten the US air bases in South Korea, Japan, and on Guam as well as aircraft carriers at sea.

Possible Response to Internal Factors

- (a) It may respond to the internal challenges much in the way Russia did when it was faced with a demographic challenge. It may abandon NFU policy.
- (b) China may come to rely more heavily on its nuclear arsenal in order to deal with the increasing budgetary pressures.

Implications for India

Military Implications

An analysis of the implications of China's strategic modernisation and force posture for India must also analyse the PLA's nuclear arsenal and weapons deployment. Some relevant pointers are :-

- (a) Consider the Second Artillery's nuclear-capable medium-range ballistic missiles (MRBMs). Some of these are located in southern and central China within striking range of India (and Southeast Asia). Others, however, are deployed to East and northeast China, within range of South Korea and Japan, both non-nuclear states.
- (b) If China is prepared to launch nuclear-tipped missiles at these targets, this would suggest something other than a minimum deterrence posture, which relies on counter-value rather than counter-force targeting.
- (c) Though China certainly does not want a war with India at this time, it seems that China does not necessarily shy from one either.

Other Implications

- (a) India needs to respond to China's nuclear modernisation. For far too long has it been mistakenly believed that military capacity building and diplomatic parleys/ talks are not mutually compatible. Whereas the reverse is true; nothing helps talks better than a strong and competent military.
- (b) Such a step might have a domino effect on Pakistan's nuclear forces as well.
- (c) It is not illogical to presume that China may well be viewing India as presenting a threat to the Chinese economy also, given that it dominates key shipping lanes.

Conclusion

It is, of course, impossible to predict precisely how China's nuclear weapons policy and strategic arsenal will develop in the coming decades. There are, fortunately, a few aspects that appear encouraging. First, there is an ongoing debate

among China's military thinkers about how and when to use nuclear weapons, notwithstanding the impending demographic crunch and pension crisis that may occur later. Hence, there is hope that China will seriously contemplate all facets of the nuclear policy before affecting any radical changes. It appears unlikely that it will increase its reliance on nuclear weapons, at least in the near to medium term. However, the modernisation of China's nuclear weapons is a worrying prospect for China's neighbours as well as for the US, and it is a prospect that India should factor into its security calculus.

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Climate Change and the Security Dynamics

Colonel Yogesh Nair*

Introduction

Climate Change as a result of alteration in volcanic activity, solar output, the Earth's orbit around the Sun and more predominantly due to emission of Greenhouse gases from anthropogenic and natural activities¹ has been a major concern across the globe. The Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC 2007) analysed many climatic uncertainties and concluded that some extreme weather events have changed in frequency and intensity over the last 50 years.² Cold and hot climatic conditions, heavy precipitation events, intense storm waves, incidence of extreme high sea level etc have become more prevalent and highly unpredictable. Over the last century, atmospheric concentrations of carbon dioxide increased from a pre-industrial value of 278 to 379 parts per million in 2005, and the average global temperature rose by 0.74°C.³ An increasing rate of warming has particularly taken place over the last 25 years, and 11 of the 12 warmest years on record have occurred in the past 12 years.⁴ The projections by IPCC for the 21st century indicate that the Earth could become warmer by 3°C by 2100 and would continue to accelerate even if countries reduce their greenhouse gas emissions. Further, the Sea levels during the 20th century rose by 0.17metres and by 2100 it is expected to rise between 0.18 and 0.59 metres⁵, which mean greater risk of storm surge, inundation and wave damage to coastlines, sinking of islands and loss of fertile land, particularly of countries with low lying deltas. Thus climatic threat and associated risks to life and livelihoods has impacted living conditions of millions of people across the world.

Effect of Climate Change

Climate change is an emerging phenomenon, intricately related to widespread threats that can impact physical and social environment. These threats are largely uncertain, diffused, difficult to quantify yet potentially calamitous with potential to derail development and endanger human security. Some of the prominent effect of climate change are analysed in the succeeding paragraphs.

Resource Scarcity. Climate change may have adverse human security repercussions through its effect on availability of resources necessary for sustained livelihood. Resource scarcity may be due to dwindling resource base or increased demand of resources on account of population rise and increased consumption.⁶ Escalating temperatures, changing precipitation patterns, and an overall reduction in annual rainfall suggest that some of the most crucial subsistence resources will become increasingly scarce in the foreseeable future.

Natural Disasters. Natural disasters related to climate change can be categorised as either geological or hydro-meteorological type. Almost all of the temporal increase in disaster frequency is accounted for by the hydro-meteorological category. More than one-third of the world's landmass and 82 per cent of the world's population live in flood-prone areas; and drought, the second most frequent type, threatens about 70 per cent of the world's population.⁷ Thus, the ever volatile climate change phenomenon is likely to have catastrophic outcomes on social systems that are sensitive to intense occurrences and lack capacity to respond to various climatic hazards. The intensity of some disaster may be so intense that the affected region may still be struggling to get over that event, when another hazard strikes the region.

Population Displacement. Climate change is likely to contribute to the movement of people within and across borders, creating 'Climate Refugees' over short and long periods of time, through its effects on livelihoods, health and the sustainability of settlements. Large scale unplanned displacement of people is likely to increase pressure on public goods and services, create rivalry over resources, and can even generate problems of border control. These alterations may directly challenge living conditions of already disadvantaged communities in many regions, increasing their vulnerability across social, economic and institutional settings.⁸ Thus, increase in climate related susceptibility could potentially trigger large-scale internal displacement and migration in search of new avenues for employment and settlement that can further lead to destabilisation, change in demographic profile and violence.

Economical Vulnerability. Climate change effects will impose significant stress on ecological and socio-economic systems due to increase in pollution, resource shortage and natural calamities. It can cause a number of economic disruptions, negatively impacting growth and undermining governance capacities. It may contribute to land degradation, infrastructure damages and crop losses from drought or flooding, affecting productivity and the economy. Sea-level rise can damage coral reefs and other coastal ecosystems which will have an adverse effect on tourism and fisheries, in turn affecting the economy of some of the dependent countries.⁹ Thus economic sectors like tourism, fisheries, agro industries etc would suffer a major blow and social disparities already wide in the present day society would further intensify.

Climate Change and Security Concerns

The earth's climate sustains life and strongly influences the existence of ecosystem. In order to understand the contours of relationship between Climate Change and Security it is essential to analyse varied facets associated with climatic phenomenon that can impact socio-political, economic and ecological development of a region. Some security risks associated with climate change are discussed in the succeeding paragraphs.

Energy Security. Climate change is likely to have impact on the supply of climate sensitive energy sources, in particular biomass, fossil fuels and hydroelectricity. It may also affect use of infrastructure designed to extract and distribute energy, such as oil and gas platforms and pipelines. The impact on security may manifest in the form of disruption of energy supplies needed for the health and well being of the rural poor, industries, households, and critical public services.

Food Security. Wide uncertainty of climate change is likely to destabilise agro meteorological conditions and coastal

environment including marine fisheries, leading to declining yields and short term food production failures. It may also damage food transport and storage systems, causing rise in food prices. Further, the expanding volume of water due to global warming is likely to cause higher sea levels which in turn can submerge a significant portion of arable land area. More extreme precipitation could also increase top soil erosion, affecting productivity due to loss of fertile soil. Faster evaporation could also turn more land into deserts. Reduced agricultural productivity is often conceived as potentially the most worrisome consequence of climate change which affects food security, especially in the poorest part of the world where hunger is already an issue. More than 850 million people worldwide are currently undernourished and the situation is likely to worsen in future as a result of climate change.¹⁰

Health Security. Deteriorating weather conditions heavily impact the health of poor people, and the uncertainty of climate change has a multiplying effect. Climate change is the main catalyst that augments disease exposure risks worldwide by exposing people to vector borne diseases such as dengue fever and malaria, water borne diseases such as cholera and gastrointestinal disorders.¹¹ These, along with heat stress and cardiovascular illness due to smoke haze may lead to increasing mortality and morbidity; or result in epidemics that may cross borders, impact economic growth, and may have wide ranging security implications. Changing disease vectors is likely to aggravate social and political instability, increase humanitarian emergencies or may even lead to civil conflicts.

Water Security. Climate change can worsen the already existing problem of water quality and availability in various regions across the globe. 1.1 thousand million population of the world are currently devoid of safe drinking water and the situation is likely to be aggravated through climate change.¹² Climate change is likely to reduce run-off in major catchments, increase pollution of surface water, deplete and contaminate groundwater resources, and may cause coastal subsidence. These are likely to undermine livelihoods, industrial and agricultural production, and may lead to tensions over the management of transboundary water resources. The global crisis may in turn fuel existing internal or inter-state conflicts and heighten competition among different users of the scarce water resources.

Cultural Security. With increasing number of people losing their dwellings and traditional lifestyle, climate change can jeopardise the cultural heritage of people and society, leaving history and tradition behind only in text. Climate change poses a fundamental threat to cultural survival for those societies whose territories are threatened by rise in sea-levels and inundation, especially small islands and deltaic states. It is predicted that some of the endangered species in Africa which are coming under immense stress due to climate impacts is likely to disappear in future, thereby posing a threat to the cultural security of the society and the state. Thus the impacts of climate change on vulnerable societies will need to be addressed not only as an issue of sovereignty and statelessness but also as a threat to cultural identity.¹³

National Security. Climate change that exacerbates social, economic and environmental vulnerability can rightfully be termed as a threat multiplier. Weaker states fail when large populations subjected to famine, flood, pandemic or disaster migrate across international borders as they do not have requisite resources and infrastructures in place to cope with the situation. Extreme events due to climate change coupled with other factors such as poor or nonexistent governance has in the past led to widespread unrest and violence, leading to regional instability and national security ramification. Further, when States fail to deliver services to its people, conditions are ripe for the extremists and terrorists to fill the vacuum leading to radicalism and terrorism in many developing societies due to the climate induced social and economic deprivation. Climate change can also fuel political tensions and conflict between developed and developing countries over emissions of greenhouse gases and on issue of sharing of burden caused by unabated climate change. The biggest concern is that the climate change is a “high probability, high impact” risk, that is likely to occur (between 90 and 97 per cent), and will have a very large and widespread impact on national security.¹⁴

Climate Change and Challenges for Military

The impacts of climate change, particularly the growing risks of natural disasters and the damaging effects on development potential, may increase the pressure on defence forces to participate in growing numbers of humanitarian assistance, disaster relief and evacuation operations. Challenges that the militaries are likely to face on account of climate change and its effects are analysed in the succeeding paragraphs.

Operational Conditions. Climate change and extreme meteorological conditions pose a range of operational concerns. Conditions of extreme heat or cold can cause unsafe environment for training and employment of forces, thereby reducing the efficiency of men and the machine. Ice/sleet storms, avalanches and landslide can cause hazardous conditions for operation in mountains; while floods/soil saturation can affect operation in plains; and coastal storm can make amphibious and riverine operation dangerous. Similarly, lightning can endanger soldiers in the open and cloud cover can cause unsafe flying conditions.

Military Installations. Coastal military facilities and equipment are threatened by frequent and high intensity damaging weather events such as hurricanes and tornadoes. Rising sea levels is yet another concern which is real and dangerous for coastal military establishments.

Environmental Refugees. Developing countries already weighed down by poverty, unresolved conflicts and poor governance are at risk of more instability caused by people fleeing due to drought, catastrophic storms, resource scarcity and economic vulnerability caused by climatic disaster, which may need serious military intervention.

Humanitarian Intervention. As extreme weather events batter more population centres, the military will increasingly be asked to provide humanitarian support. Disastrous climatic events of high intensity will require frequent mass mobilisations of the military to cope with humanitarian disasters, affecting preparedness of defence forces for their conventional role.

Pandemics. As certain regions become warmer, researchers view that the range of insects and other disease carrying vectors will expand. Pandemics not only cause humanitarian catastrophes, they can directly threaten deployed troops for military operations.

The Way Forward

Climate change is one of the greatest threats facing the planet. Climate related disaster can have enduring consequences on human security and can trigger a catastrophe, if concrete steps are not initiated sooner than later. Some of the actions which need consideration and immediate attention are given below : -

- (a) **Reducing Greenhouse Gases.** Machines / equipments functioning on high-carbon path are the major contributors to greenhouse gases. There is an urgent need to develop domestic utility items including refrigerators and air conditioners with technology which emit lesser greenhouse gases. It is also important to introduce environmental friendly hi-tech systems to manage climate security risks, and improve public health institutions.¹⁵ Cooperation among countries within and beyond the region to overcome the technical and financial barriers including transfer of technologies is a must. As regards military, for most countries a strong technological capability with sleek force matrix is the objective. Hi-tech weaponry and aircraft bring a hefty carbon footprint and there is a need to 'green' its activities by adopting clean energy generation for reducing military's carbon footprint.
- (b) **Adaptation.** As the impacts of climate change have a wide ranging ramifications, the support to adaptation needs to cover all affected sectors viz; water scarcity, agricultural resilience; public health systems to deal with increased disease incidence; disaster management system including preparedness; early warning and response at national and regional levels for various climate change effects. Power stations and oil facilities providing fuel for the military are undoubtedly the major concern and protection needs to be on the basis of their climate adaptation benefits and devastation avoidance. Developing countries need to be supported through investments in capacity-building, especially those overstretched by devastating cyclones, floods, droughts or other hazard events.¹⁶
- (c) **International Law and Institutional Strengthening.** International Law needs to be formulated for unprecedented challenges posed by climate change such as displacement of persons due to submergence of costal land/ island nations, and the rights and relocation of citizens of such territories. There may be issues concerning national sovereignty, claims over marine resources etc. Legal and political arrangements may be necessary for the protection of affected populations. It also includes enhancing coordination among institutions working at regional, national and local levels, across policy domain, and between the public, private and community sectors.
- (d) **Preparation for Climatic Disaster Mitigation.** Mitigation efforts till date unfortunately have been painfully slow and inadequate. In future the dynamic climate change phenomenon is likely to witness more and intense events such as tsunamis, flooding, earthquake etc and when these coincide with armed conflict then it can lead to devastating impact on populations. The challenges for armed forces in such situations will be to maintain a level of control between the battle-space and managing utility by ensuring provision of adequate food, shelter and medical supplies. Chaos, confusion, human vulnerability and suffering will thus compound any conflict situation and militaries will need to be prepared to face such an eventuality. Militaries will need to establish their own responses as they might be drawn into more frequent combat operations¹⁷ due to events such as large-scale migrations or conflicts over resources or adverse climate disaster.

Conclusion

Climate change presents both direct and indirect threat to the security and stability of the society and the state. It is a well known fact that the autocracy of climate and weather adversities is only getting worse with each passing day. These are not just a narrative, or a probability, it's an absolute reality. The worrying factors are the magnitude, geographical extent and timescale of given impacts. Climatic crises with ever increasing intensity and unpredictability have the potential to present more pervasive and large scale security implications than any other crisis. For this reason, climate change challenges need to be placed at the core of security considerations in the present day scenario. This may well require a change of mindset in the strategic hierarchy and preparation at all levels to deal with various climatic eventualities. Military being one of the major assets of nation states needs to be incorporated into national response mechanisms. Despite differences among regional countries with respect to the responsibilities, capacities and mechanisms to respond; the determination of intellectuals, society and nations to take up the challenges is an encouraging signal. Time is just ripe for undertaking a sincere climate audit and work towards a holistic response.

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The Hovering Clouds of Water Wars

Shri MS Menon*

Introduction

Ban ki-moon, UN Secretary General, has recently warned the global community that planet earth is facing severe water crisis and the scarcity of this natural resource would be a potential fuel for wars and conflict. He was concerned of the indifference and inaction of the governments concerned in taking steps to prevent instances of the resource being spoiled, wasted and degraded.¹

This is not the first time that such fears were expressed of looming water wars by leaders of international organisations. In the 90s, Ismail Serageldin, then Vice President of the World Bank had stated that the wars of the 21st century would be about water and not oil.² Also on the occasion of the World Water Day, 2002, the message from the then UN Secretary General, Kofi Annan was cryptic that “fierce national competition over water resources has prompted fears that the water issues contain the seeds of violent conflict.”³

The fears are real since misuse of the resource and poor management practices have been causing depleted supplies, falling water tables, shrinking inland lakes and stream flows diminished to ecologically unsafe levels; thereby, leading most parts of the world to the threshold of water famine. High population growth, rising consumption and pollution have posed significant threats on fresh water availability and climate change is also making a bad situation worse. Hence the threats of water wars are heading to become a reality as we are facing an unprecedented demand on the relatively decreasing natural resource of fresh water supplies and there is no substitute available to replace the natural resource like water.

Recent Studies

In this connection, a recent report on global water security released by US Secretary of State, Hillary Clinton, on the occasion of the World Water Day, 2012 is relevant.⁴ It has brought out the risk of water wars in the coming decades. The report, based on the assessment of Federal Intelligence Agencies, has concluded that lack of fresh water to meet the demands of a surging population would create tensions within and between the states, causing global instability and conflict. The report has also cautioned about the use of water as a weapon of war or a tool of terrorism becoming a reality in the near future.

Another interesting study published in the Journal of the US National Academy of Sciences by David Zhang recently, based on the data of more than 8000 wars in the past had established that the resource shortage was the main cause for triggering these wars.⁵

Water is a gift of nature playing an important role not only in the origin of civilization, but also in the overall development of the social fabric. Most of the world's water is saline and only 2.5 per cent is fresh. A major part of this fresh water, almost 97 per cent, is tied up in ice, permanent snow and fossil ground water and only the remaining 3 per cent alone is renewable and available for use as surface and ground water. Human use of water has increased more than 35 folds over the past three centuries. According to studies by International Water Management Institute, nearly 1.4 billion people amounting to a quarter of the world population, or a third of the population in developing countries would be experiencing severe water scarcity by 2025.⁶

Legal Status on Use of International Rivers

There are more than 260 international rivers covering almost one half of the surface of globe, and an untold number of shared aquifers providing fresh water to people settled within these basins. Many of the participating basin states look at the administrative boundaries as the basis for decision making, ignoring the fact that rivers do not recognise political boundaries and legal generalisations. Hence it has been a cause of legal battles and consequent political tensions between countries in various continents.

International laws that govern the use of transboundary rivers are poorly developed. In 1997, the UN attempted to develop a framework on the issue and adopted the ‘Convention on Non-navigational Uses of International Water Courses’, but it is still to be ratified to come into force. Though it sets out many important principles for co-operation and joint management of such waters and provide practical guidelines for allocations, no practical enforcement mechanism exists in the text to back up the decisions of the final arbiter - the International Court of Justice (ICJ). Further it institutionalises the two conflicting principles in the upstream-downstream uses of an international waterway by emphasising both on ‘equitable use’ and ‘an obligation not to cause significant harm.’ These would enable the upstream users to stress on the principle of equitable use, while the downstream riparians would demand the protection of their existing uses under the provision of ‘no significant harm’ and might thereby trigger further disputes.

Water Wars - a Myth or Reality?

Many analysts do not subscribe to the view that water would become a source for wars in this century. Water wars are not economically viable, they argue. For the cost of a day's war, alternative sources such as de-salination plants could be built to meet the water needs, they claim. They also point out that the past history on wars does not indicate any full-fledged battle for using river waters and the recorded disputes were all for controlling navigational rights on these rivers. However, they appear to forget the fact that wars are never cost effective.

The earliest documented conflict over water use is the dispute between the Sumarian city states of Lagash and Umma over the right to exploit boundary channels along the Tigris sometime during 2500 BC.

We have also witnessed a number of water related conflicts in the last century. To name a few, in 1958, the Nile waters were the cause for tension between Egypt and Sudan. Guns boomed in the conflict between Israel and her neighbours in 1967 as the Arabs wanted to divert the waters of the Jordan river system. In 1975, the dispute regarding the flows in the Euphrates brought out a hostile situation between Iraq and Syria. Confrontation occurred between Mauritania and Senegal on the Senegal river in 1989.

Water Treaties and Their Resilience

While historic reality does not point out to a full scale war over water, the newly added problems of climate change and increase in pollution further affecting the water availability are leading to an environment more conducive to trigger a military conflict. However, some war analysts are of the view that if the states sharing the international rivers conclude treaties and establish water regimes, such agreements are resilient enough to survive conflict inducing situations. To justify their stand, they cite the Indus Waters Treaty (1960) between India and Pakistan for sharing the waters of the Indus river as a model which survived two wars and many war like situations between the two countries. They also point out that there are many such treaties and agreements entered into by some of the co-basin states during the last century to optimally share and use their water resources due to which many potential threats have been averted.

The contention of these analysts that the inbuilt resilience in the existing water treaties and agreements is adequate to prevent wars has also its limitations, as an in-depth study of such agreements shows that some biased provisions in the agreements on sharing common rivers have brought out fresh problems. When scarcity looms large, these provisions could be exploited by one party to its advantage ignoring the interests of other parties and this could trigger conflicts. It is also seen that based on their past experience in the working of the agreements, many of the parties who are signatories to the existing treaties are pressing for renegotiating the terms with their counterparts as they feel that they have been taken for a ride while signing the agreements.⁷

Working of Existing Treaties

Take for example, 50 year old history of the Indus Waters Treaty (1960) between India and Pakistan. It is the story of a tragedy that began with hope as demonstrated by past events. It has failed not only in accomplishing its objective of optimum development and utilisation of the Indus waters, but also in settling water disputes between the two all these years. India feels aggrieved that it had to sign the Treaty which ignored its rightful share of more than 40 per cent of the Indus waters and gave it only about 20 per cent in the water allocation, due to World Bank using a concept of equally dividing the tributaries instead of equitably dividing the resource as per international norms. The disputes are continuing with no solution in sight as Pakistan is not willing to renegotiate and review the provisions in the Treaty.

The peace brought about by the treaty signed between the USA and Mexico on the Colorado river (1944) is under threat; since, recently Washington took the unilateral decision of lining parts of the All American Canal bordering Mexico ignoring the provisions and the latter objected to that action. The US took the stand that the canal being located in American territory and the water flowing through that being California's share of the Colorado river water, it had every right to take a sovereign decision to line it, with the objective to make more water available to its people by preventing seepage loss. Mexican government disputed this right basing its case on the principle that their farmers of Mexicali valley adjoining the border had established a beneficial use of the seepage water since decades, giving them the right under the treaty. The tempers are rising on the issue between the two countries.

Likewise, the project initiated by the US unilaterally without consulting Canada for the diversion of water from North Dakota's Devil's Lake to Manitoba (Canada) ignoring the provisions in the Boundary Water Treaty (1909) has been objected to by the latter as it feared that the proposal would damage their ecosystem. Canada pointed out that the proposal should have been discussed and approved by the International Joint Commission (IJC) set-up by the two under the Treaty which had been handling all trans-boundary water issues for more than 100 years. But the US is poised to go ahead with the scheme bypassing the IJC and ignoring Canada's protests. This has resulted in strained relationship between the two.

In South America, the Itaipu Treaty signed in 1973 between Paraguay and Brazil for the optimum utilisation of the Parana river for power generation, has opened up disputes on the benefits accrued. According to Paraguay, Brazil got undue benefits as the former had to invariably sell all its surplus energy to the latter at cheap rates as per the treaty provisions. Paraguay wanted to renegotiate the terms but Brazil is not willing till the Treaty lapses in 2023.

In Africa, a battle of control over the Nile has broken out between Egypt and the countries of Sub-Saharan Africa with the latter complaining that they have been denied the due share of the Nile water as per the existing treaty (1929). Flouting the Treaty provisions, Tanzania plans to build a 105 mile long pipeline for drawing out water from lake Victoria which feeds the Nile river.

Uneasy calm continues to prevail between Mauritania and Senegal on the Senegal river. The co-basin states, Mozambique, Zambia and Zimbabwe sharing the Chobe waters are still to come to terms with the present situation. The long standing disputes between Portugal and Spain on their common rivers could be settled by their signing the 'Convention' concerning the management of their shared river basins in November 1998 and adopted by both the countries in January 2000. However, according to media reports, the worst drought of 2005, has resulted in fresh disputes over sharing the Tagus and Douro waters in spite of the standing agreement.

Likewise, though the dispute between Hungary and Slovakia on the Danube river has been settled at the instance of the ICJ, many legal questions are being raised on the outcome of the court decisions.

Similarly, the disputes on the waters of Amu Daria and Syr Daria draining into the Aral Sea are waiting to erupt into major conflict among the Central Asian Republics. Troubles are brewing in Asia with the Chinese proposals to divert the waters of the Mekong, Yarlung-Tsangpo and Salween to its dry north, in spite of protests from the downstream countries as also from the Mekong River Commission. Interestingly, China is not a party to any treaty with

its neighbours regarding the sharing of its transboundary rivers.

There are more such simmering disputes on the use of common rivers all over the world. The examples shown above reveal that in spite of existing agreements, many nations continue to feel that they have not been able to get their due in their common rivers. As the demand for water is increasing by leaps and bounds to meet the aspirations and requirements of a surging world population, and the scarcity is becoming a reality, there is every possibility of the bickering countries taking the conflicts to the battlefields.

Actions Needed

The root cause of any conflict is the scarcity of the resource as brought out in many studies carried out on the subject and in this case it is water. Hence, the solution lies in improving its availability. For this purpose, supply and demand management aspects have to be analysed for an effective strategy and to provide for concrete solutions. These include adoption of techniques for improved water availability such as water conservation and pollution prevention, improving conveyance and water use efficiency, recycling and reuse of drainage water. These actions have to be taken both within and among the basin nations to avert the crisis. The task is a daunting one. The problem is complex and multisectoral, and the solution involves correcting decades of mismanagement of this resource. In the present context of socioeconomic and ecological problems of development under the conditions of severe demographic pressures, there is urgent need to take up measures as above to improve the availability of the resource.

Conclusion

Water is available to meet everybody's need, but not enough to meet their greed. This fact has to be recognised by all stake holders to work together to make the optimum utilisation of the available resource. International organisations have to take a greater institutional role to start dialogues among the contending states to impress upon them to share the limited resource to meet their water needs rather than insist on their water rights and to develop a sustainable arrangement in this regard. It would then be possible to mitigate the conflict inducing characteristics of water by taking adequate measures now itself, instead of waiting for the flash points to occur.

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Spring Thunder in Bangladesh

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Introduction

After the liberation of Bangladesh, Sheikh Mujibur Rehman, who had been arrested and taken to Pakistan and kept in Military custody was released and returned to Bangladesh. He formed the first Government of Bangladesh. The surrendered Pakistan Army, all 92,000 of them, were transferred to India as prisoners of war. This included about 300 odd officers and men of the Pakistan Army who were specifically named by the new Bangladesh Government for brutal crimes of rape and genocide. Meanwhile, the leader of the Jammāt-e-Islami Gholam Azam, who had sided with the Pakistan Army during the liberation struggle, and his lieutenant Abdul Khader Mollah, who during the holocaust earned the epithet 'the Butcher of Mirpur', fled to Pakistan secretly crossing the border into West Bengal and then slipping into West Pakistan.

The discussions between the Government of India and Pakistan about the return of the Prisoners of war (PWs) who had surrendered in Dacca in December 1971 continued till 1972. Under pressure from the United States, the Indian Government decided to return the 92,000 prisoners of war including the three hundred odd Pakistani Army officers, JCO's and others who had been accused of raping Bangladeshi girls and brutally killing hundreds of Bangladeshi men, both Hindus and Muslims for opposing the Pakistan Government. Finally, the Government of India and Pakistan signed an agreement and all the 92,000 PWs were returned to Pakistan. This included the three hundred odd personnel listed as having committed genocidal crimes during the liberation war.

The Rise and Fall of Mujibur Rehman

Mujibur Rehman, the head of the Awami League, the secular party of East Pakistan and now of Bangladesh began his role as leader of the newly born country of Bangladesh with immense goodwill. Unfortunately, Mujib squandered all this goodwill mainly because he thought that his people were behind him. Two factors pulled him down. The first was that there was an extreme left party; the Jatiya Samajtantrik Dal, Jashod for short, an extreme left wing party which had grown up as an undercover group in the Awami League. One of the leaders of Jashod was Major Ziauddin; a Bengali Muslim officer who had crossed over from Pakistan after the revolt had begun along with one Major Abu Taher, and surrendered to the Border Security Force on the western border. They were taken to East Pakistan and after training in guerilla warfare had fought against the Pakistan Army in two sectors on the Assam, East Pakistan border. Major Ziauddin had officially joined the Jashod after Bangladesh was liberated and so had Major Taher, who had become a Colonel in the new Bangladesh Army.

The second factor that influenced the development of Jashod was the way the Bengali officers, who were in West Pakistan when the revolution started, had now come back and managed to get their seniority over the many young Bengali Muslim volunteers who had been trained in the Mukti Bahini, fought against the Pakistan Army and had then been taken into the new Bangladesh Army.

As smuggling went on unchecked, the cost of rice in the rural areas became prohibitive and very soon famine conditions prevailed in interior rural areas. The Government meanwhile ordered the Army to assist the Police in detecting smugglers. In early 1974, the Army was ordered to search and seize unauthorised arms and prevent smuggling. The Army officers and soldiers deployed for checking smuggling and searching for arms found that most of the leaders of the holders of unauthorised arms and the leaders of smuggling gangs were protégés of powerful Awami League leaders including the brother of Sheikh Mujib. When the Army arrested the Awami League leaders, the Prime Minister's secretariat intervened and got the Awami league leaders released. This was when the divide between the Army and Sheikh Mujib developed and soon widened.¹

The Jashod had done its homework well in the Armed forces during the revolutionary war through Colonel Abu Taher and Colonel Ziauddin and the Sharbohara party. It was natural for the Jashod to take the lead in striking the leader Mujibur Rehman, whose image had been tarnished. It was however the right wing that struck the blow. Mujib was assassinated along with his wife and several close relations by a group of Majors of the only Armoured corps regiment of the Bangladesh Army. Some of the officers and subordinate officers of the armoured regiment who had holed up in the President's building after the assassination were allowed to go abroad and are yet to be arrested and brought back to face trial in Bangladesh.

Bangladesh Under Army Rule

Shortly after the assassination of Mujibur Rehman, a military coup was attempted by Brigadier Khalid Musharraf. It was generally believed that India was behind this coup but it soon transpired that the coup was an individual attempt by Brigadier Musharraf. General Ziaur Rehman was meanwhile being persuaded by Colonel Abu Taher to lead the secret rebellion brewing in the Bangladesh Army by the Jashod. At the last moment General Ziaur Rehman held back and had Colonel Abu Taher arrested by using the Bangladesh Police. The Jashod's rebellion had meanwhile started in several cantonments and several officers were killed by the revolting soldiers. General Ziaur Rehman immediately rallied the Army after Colonel Abu Taher was arrested and confined in Dacca jail. Very soon the Army rallied behind General Ziaur Rehman and the leftist rebellion was controlled with several rebelling subordinate officers of the Army being arrested. Many officers who had joined the Jashod went into hiding. The Jashod was never able to revive the spirit of rebellion that had been built up by Colonel Abu Taher and Colonel Ziauddin. Colonel Abu Taher never saw the light of day after his confinement in Dacca jail. His trial was conducted with full speed and in secret and he was convicted and hanged in the jail. The leftist rebellion died with this gallant officer, who had only the well being of his country in his mind.²

With the ascendancy of General Ziaur Rehman, the policy of the Awami League was reversed and good relations were re-established with Pakistan. The Jammāt leaders who had fled from the liberated Bangladesh were allowed to come back to Bangladesh. Gholam Azam, the Amir of the Jammāt-e-Islami who had fled to Pakistan and Saudi

Arabia returned to Pakistan on a Pakistani passport.

With the liberation from Pakistan and the creation of Bangladesh, a couple of developments took place that began to transform the rural scene in the newly born country. This was the growth of a Non Governmental culture that made a big effect on the rural scene. The first was the creation of the Grameen bank that began giving micro-credit loans to women in the rural areas. Non Government Organisations (NGOs) were set up in Bangladesh since independence. They however came into prominence in the late 1980's, largely because of the failure of the State to deliver basic services in marginalised poor segments of society, especially in rural areas. By 1998, there were 997 local and 135 foreign NGOs as per the NGO Bureau, Dacca.

With the return of the Jammāt-e-Islami leaders to Bangladesh and the Army on the ascendant in ruling the country, the rural clergy and the Jammāt-e-Islami began to flex their muscles. There was a system in the rural areas of Bangladesh for the rural clergy to pass fatwas and salish to settle domestic feuds and local disputes. On all matters concerning women or girls, the Islamic clergy was brutal and cruel in meting out punishments. The Press in Bangladesh was however free and faithfully reported incidents of crude and horrifying punishments meted out by rural Mullahs particularly on women.³ The rural Mullahs also began a campaign of maligning NGOs who had managed to make a dent in the rural economy of Bangladesh by their continual efforts at empowering rural women. The Islamists headed by the Jammāt-e-Islami despite their best efforts could not suppress the work of the NGOs. A Freedom Fighters organisation had been formed headed by Jehanara Imam, the mother of a freedom fighter who had been killed by the Pakistan Army. This organisation wanted the Judiciary to exercise full jurisdiction in all criminal matters and did not want any powers to be vested with the rural Mullahs. The Islamist groups like the Jammāt-e-Islami and Oikya Jote opposed this and wanted the rural Mullahs to be vested with judicial powers.

The Freedom Fighters League (FFL) organised a massive procession pleading with the Government to try the persons who had collaborated with the Pakistan Army, to remove all powers with the rural Mullahs to try cases locally and to allow the NGOs to function so that rural women would have some control of their lives. As the momentum was building-up, the incident of the demolition of Babri Masjid took place in India on 6 Dec 1992. The effect of this demolition was horrendous. The movement built-up by Jehanara Imam was crushed on the day the information of the demolition of the Babri Masjid in India was received. The Muslim fundamentalist right seized the opportunity and within hours mobs were out and attacking Hindu temples and killing and raping Hindu women. The agitation of Jehanara Imam was simply blown away.

General Ziaur Rehman had re-established links with the Inter Services Intelligence (ISI) of Pakistan and raised a parallel organisation called the Director General of Forces Intelligence (DGFI) for Bangladesh. This organisation was to play an infamous role in assisting insurgent groups of India's Northeastern states-Assam, Nagaland, Tripura and Manipur. He also set-up a political party called the Bangladesh Nationalist Party (BNP). Incidentally, though he was responsible for bringing back the Jammāt-e-Islami leaders who had run away after the liberation war to Bangladesh, he also continued to head the FFL of Bangladesh.

General Zia was assassinated by a coterie of officers of the Bangladesh Army when he was on a visit to Chittagong. This appeared to have been as a result of some disagreement between a group of officers posted in the Chittagong area and General Zia. No involvement of any outside agency or country appeared to have been involved in this assassination plot. General Ershad took over as the new Army Chief and later on as the President of the country. It was only in 1991 that Ershad stepped down and elections were held and Begum Khaleda Zia, the President of the BNP took over as the Prime Minister. The point of interest is that the BNP allied with the fundamentalist Islamic party (the Jammāt-e-Islami) that had collaborated with the Pakistan Army against the people of Bangladesh in the liberation war.

After the elections of 1991, when the BNP led by Begum Khaleda Zia, the widow of General Ziaur Rehman won the elections taking the Jammāt-e-Islami (JEI) as a partner in the Government, politics became polarised with the Awami League (AL) headed by Sheikh Hasina, the widow of Sheikh Mujibur Rehman, being secular while the BNP was pro-Islamic, particularly as the BNP and the JEI Bangladesh fought the elections as a coalition. Regrettably, a polarisation to some extent took place in the bureaucracy. Luckily, the Bangladesh Armed Forces were not affected by this.

In her first term as Prime Minister Sheikh Hasina and the AL could not do much to clear the issue of the war criminals of 1971. When she won the elections in 2006, the developments after the BNP laid down office and the interim Government that had been formed by the BNP who were to conduct the elections turned out to be quite partisan in organising the elections. It was at this time that the Army Chief, General Moin stepped in and in a partial coup, removed the partisan members of the Interim Government and appointed new members. The election was smoothly conducted and the AL won the majority and formed the Government. Immediately after the elections, there was a rebellion in the Bangladesh Rifles (BDR); with their Chief and his officers and some families being trapped in the BDR Headquarters. The Army stepped in and the rebel personnel were quickly killed and arrested. Some weapons were recovered from the BDR campus which were not Government issued weapons of the BDR, confirming the suspicion of outside elements being involved in the mutiny. The Armed Forces of Bangladesh stood solidly with the AL Government.

It was only after settling down after the BDR mutiny that the AL Government took up the old issue of trying the war criminals of the 1971 Liberation war. An International War Crimes Tribunal was created after framing the necessary laws and the leaders of the JEI Gholam Azam, Abdul Khader Mollah and others were charged with offences of murder and collaborating with the Pakistan Army during the liberation war.

The International War Crimes Tribunal of Bangladesh

The issue of setting-up of this tribunal to try leaders of the JEI, a coalition partner of the alternate main political party the BNP, was a bold and necessary step. To consider the issue dispassionately, the facts as given in the succeeding paras should be considered.

It is a fact that the JeI sided with the Pakistan Army during the liberation war and committed considerable atrocious acts like raping women and girls; and killing people of East Pakistan who were supporting the liberation of East Pakistan. The fact that these incidents took place cannot be disputed, as the Indian Army who went into East Pakistan were direct witnesses to the brutal acts of the Pakistan Army and the JEI leaders and cadres, who supported the Pakistan Army against the freedom fighters of East Pakistan. The point however is that it is now more than forty odd years since the Liberation war of Bangladesh in 1971. Obviously the offences like rape and murder shooting and killing of innocent East Bengal civilians, both men, women, cannot be proved by medico legal evidence. The issue is of vital national importance for Bangladesh and it has to put behind the horrendous genocide that was committed on the civilians of East Pakistan. The trials therefore have to be carried out and the ghosts of the 1971 war exorcised if the country has to go forward with dignity.

The only trial that can be compared to this is the trial conducted in Israel by the Government of Israel against Adolf Eichmann a German who took a leading part in exterminating the Jews in Germany in the 1930s and 1940s when Israel had not yet been created. Incidentally, Adolf Eichmann had managed to flee to Argentina and was living with a false identity and was traced by the Israeli Intelligence the Mossad, kidnapped and brought to Israel, tried and executed. The legal issues involved were apparently impossible to prove. Yet the crimes of genocide by Eichmann could not be denied.

The case of the Jammatt leaders being prosecuted today for committing genocide of innocent people of East Pakistan who were siding with the liberation forces are much less of a legal issue than the case of Adolf Eichmann. The only relevant point is the long interval between 1971 and 2013 and the obvious absence of medico-legal evidence.

The only conclusion that we can come to is that for Bangladesh, the ghosts of 1971 have to be exorcised. The trials have now to be concluded on the available evidence and the Judiciary of Bangladesh, represented by the International Crimes Tribunal should weigh the evidence and do justice to the innocent victims of the genocide of 1971.

The first trial to be concluded was that of Abul Kalam Azad alias Bachu Razakar, who was condemned to death in absentia. The accused had slipped into India and probably is in Pakistan. The second trial to be concluded was that of Abdul Khader Mollah also known as the butcher of Mirpur, one of the first to flee from East Pakistan when the tide turned against the Pakistan Army after the Mukti Bahini and the Indian Army were winning the war of liberation in 1971. He was given life imprisonment, when everyone was expecting the death penalty. It is reported that the accused made an insulting gesture when the sentence of life imprisonment was announced, meaning that he had escaped the death penalty.

The third accused to be convicted was Dilawar Hussain Saydee, Deputy Chief of the JEI, on 25 Mar 2013 who was given the death penalty.

The Shabagh Square Gathering

The young people of Bangladesh, began collecting at the Shabagh Square on 5 Feb 2013, after the sentence of Abdul Khader Mollah was announced by the International Crimes Tribunal giving him a life sentence. The next day, young people began collecting at the Shabagh Square and started shouting slogans "Khader Mollah Fansi Chai" (Khader Mollah should hang!) Since then, the groups have been collecting and shouting slogans that the Government should appeal against the verdict of life sentence to Khader Mollah and give him a death sentence. The AL Government have since moved the Parliament to amend the International Crimes Tribunal Act to allow the Prosecution to file petitions to enhance the sentence awarded.

The interesting fact about the crowds gathering at the Shabagh Square is that they have not allowed politicians of the AL to address them. This has surprised the JeI leaders. The reaction of the JeI and the Islamic Chatra Shibir (ICS), its student wing, was expected and groups started to organise themselves from their bases in Chittagong and other towns. The JeI and the Islamic Chatra Shibir started their agitation immediately after the International Crimes Tribunal was notified on 25 March 2010. The later development has been the creation of the Hifazat-e-Islam (HEI), obviously organised by the JeI and probably abetted by the BNP, their coalition partner.

The Government of Bangladesh has taken stringent action against the first marches by the JeI and the ICS and then later by the HeI. In the police actions against the marching groups of the JeI and the ICS and then the HeI, there have been a number of people injured both on the side of the militant groups opposing the movement and also on the side of the Police and the Rapid Action Battalion. Besides this, several Muslim young men who have protested at the Shabagh Square have also been surreptitiously attacked and killed. There have also been revenge killings of close relations of crucial witnesses who testified against the accused JEI leaders.

Bangladesh at the Cross Roads

The Islamic fundamentalist Tahrir groups led by the JeI, its student wing, the ICS, the Hizb-ut-Tahrir, Hizb-ut-Towhid, the Jagrata Muslim Bangladesh have all joined hands to fight the AL Government. The issue is simple. Is Bangladesh going to be a democratic country where all religions can peacefully coexist? Of course fundamentalist Islam is not a religion that can co-exist with moderate religions. This is a crucial issue that would not be decided soon. The AL Government has to play its cards in a firm but balanced manner. The Government's Police and Para Military forces have taken a number of casualties and the fundamentalist forces have also taken a beating and suffered many casualties. The Government has been firm and balanced in dealing with such large scale agitations. We can only wait and watch and hope that the forces of moderation will ultimately triumph.

Endnotes

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Those Were the Days

Dr Ranjana Malik*

On a cold, wintery day on 22 Jan 1968 I was transported from an all-girls institute, the Lady Hardinge Medical College in Delhi to the Army Medical Centre and School at Lucknow.

There were three of us from our college who had applied for the interview and medical tests. Unfortunately, Nirmal, who was the keenest of us all, was declared medically unfit due to weak eye sight. My friend, Chand and I were seen off at the Delhi Railway station by a very large number of our friends and colleagues. It was an emotional send off since we had spent five and a half years with these friends, who were by now, more like family.

At Lucknow we were received by a soft spoken, amiable Havildar, who bundled us, along with a number of other young Doctors into a 3-ton truck. In the twinkling of an eye we were transformed from Doctor Sahib to "Sir" since that was the way we were addressed by army jawans then. It took some time to get used to this form of address.

I had always been in awe of the Army - the glamour of the uniform, the discipline and the inbuilt value system. All these had always impressed me and I was thrilled to be finally in the Army, ready to attend the Basic Medical Officer's course. Unlike the present day, when Doctors are first posted to Military Hospitals and are later sent for the Basic Medical Officer's Course, we were all straight out of our Medical Colleges. Those who came as interns, before having done their internship, were commissioned as Lieutenants while, those of us who had completed our internship were commissioned as Captains. Even now I joke that out of the 3 parchments that we have in our house signed by the President of India, two are for commissioning of Second Lieutenants, and, only mine, is for a Captain. The parchment for Captain Ranjana Khorana has been signed by the President, VV Giri!

The excitement of being commissioned as officers (although we were only called by our chest numbers), the measurement and fittings for our PT Kit, uniforms, Mess Dress, the wearing of our badges of rank (3 stars!) balancing our berets precariously on our heads, cycling madly for PT, rushing for classes, then games and then dinner was all a big blur of frenzied activity. I did not mind the PT, drill and still more drill, weapon training or the games but the aching calves and thighs made us groan at night. One of our coursemate, wife of a Colonel and mother of two children, had to learn to cycle from scratch. She had many falls and bruised her knees and elbows and sustained other injuries. She found the going rather tough besides the fact that many unkind remarks were tossed at her.

The weapon training sessions were exciting and I fared fairly well with the 303 Rifle shooting. My room mate was able to fire five shots on a playing card with the pistol and she had displayed this card, signed by the instructor, prominently in our room. When her prospective mother-in-law came to our room she was quite alarmed to see that her daughter-in-law is a sharpshooter!

The outdoor training camp was hard work, but it was also a lot of fun. I have wonderful memories of the 12 mile route march, pitching of our tents, outdoor exercises, weapon training, the fun and laughter, the singing and dancing sessions and the campfire in the end. All these memories remain indelibly etched in my mind.

Another unforgettable thing that happened while I was at Lucknow was my steady exchange of letters with Ved, who I had met just before I came here. My letters gave all the hilarious details of my stay there and his letters, safely kept till now, are treasures which helped us to get to know each other so well. My romance with the uniform blossomed into romance with the man in uniform, the one I got married to!

After 6 weeks of Military Training and 10 weeks of Clinical training at the Command Hospital, I left for Military Hospital, Dehradun, my first posting. It was a beautiful hospital, very picturesque and spread over a vast area. I stayed in the Military Hospital Officer's Mess, since it took me some time to acquire a scooter for myself. Ved came to see me often at Dehradun. After we decided to get married, he transferred his new scooter to me.

The Military Hospital was a good place to work in and extremely satisfying. The Commanding Officer, Colonel Lobo and all other senior officers, Colonel Bharat Singh, Colonel Kanwar, Major Das were kind, very encouraging and extremely appreciative of the work I did. Colonel Bharat Singh, Advisor in Surgery, was an excellent teacher and guide and a wonderful human being. This was a busy hospital and all my colleagues loved to work day and night. Whenever an Emergency case came at night, all of us rushed to the Operation Theatre to get the chance to assist Colonel Bharat Singh in the Operation Theatre. The companionship that we all shared was complete. Even today, after 45 years, I am in touch with some of these colleagues.

The experience of being Duty Medical Officer of a busy hospital can be quite challenging. The shouldering of all responsibilities in the hospital on your own is quite an experience. After my first duty, when I wrote out my report, I was called by the Registrar who showed me the Commanding Officer's comment praising my report.

On two particular occasions, I faced a major crisis. On a bright sunny, Sunday afternoon, I got a call that a 3-Ton truck carrying families from 39 Gorkha Training Centre, who were out on a picnic in Mussourie, had rolled down a hill. There were many casualties amongst the picnickers - some had died, a large number were seriously wounded and there were two infants who had survived while both parents succumbed to their injuries. I rang up the Commandant of the Hospital, Commandant, 39 Gorkha Training Centre, sent ambulances to Mussourie, alerted the Wards, Intensive Care Unit, the blood bank and the surgical teams. It was a major exercise tending to the wounded besides getting people from the Centre to take care of the grieving relatives.

A similar incident happened once again when I was on duty. A truck carrying the Football team of a unit toppled over near Mohand, in the hilly area short of Dehradun. After alerting my Commanding Officer, Adviser Surgery and staff of the Intensive Care Unit and Blood Bank, and briefing the Internee Medical Officer at the Military Hospital, I went along with the ambulances and stretcher bearers to collect the soldiers. It was a major exercise getting all the

wounded back to the Hospital. When I arrived late in the evening, Colonel Lobo said that I needn't have gone myself and should have sent my younger male colleague.

While I was posted at Dehradun, I got married to Major Malik in September 1968. He was posted in the Military Operations Directorate at Army Headquarters. For a year and a half we stayed separately. Meanwhile, I got a posting order, first, to Tezpur and then to Military Hospital, Nasik. These postings were got cancelled with great difficulty. When my husband approached the Medical Directorate, they said categorically that they are not in favour of posting husband and wife together! Such a statement truly defies logic! Finally, it was in December 1969 that I got posted to Military Hospital, Jabalpur and, Ved, my husband, was posted back to his battalion, 3 Sikh Light Infantry, which was then in Jabalpur.

The bliss of setting up our first home, the joy of seeing our first born child made this move memorable. Unfortunately, our stay together was rather short lived. In January, he moved out for collective training and in May he went to Dehradun on temporary duty to conduct the Pre-Staff Course and before you could say Jack Robinson, in September 1970, he was posted out to another battalion which was in some trouble in Mizoram. So, out of a total of nine months, we were together for barely four months.

I stayed on in Military Hospital, Jabalpur for an uninterrupted tenure of three years. It was a good hospital and I enjoyed my work thoroughly. I was a fiercely independent officer who took all my duties seriously and managed the home and office fronts efficiently. I was fortunate to have good help at home to care for my little son, even when I was on night duty. With friendly, cooperative colleagues in the office and friends in the battalion and brigade, I had no problems whatsoever. The only difficulty was the lack of communication with Ved. Letters were the only means of communication and while we wrote to each other every single day, each letter took almost 25 days to reach him and by the time I got a reply, a month and a half had passed. Through this daily communication, I made sure that he did not miss out on a single day of our son's growing up.

One day, I got a summons from a Dehradun Court asking me to come to Dehradun as an expert medical witness in a criminal case. An officer from the Madhya Pradesh, Bihar and Orissa Area sent a letter saying that officer cannot be spared due to exigencies of service. Promptly a letter arrived that "Soldier's Litigation Act no 1925 - cannot be applied in a criminal case". Another date was fixed for this testimony of mine. Unfortunately my son fell ill and had to be hospitalised, so I was also admitted to the Hospital and the court was informed that my probable stay in hospital would be 10 days. The court set another date. By this time another officer got posted to the Area HQ and since he was unaware of the earlier correspondence, he again sent a letter that officer cannot be spared. Promptly came a letter addressed to me, my Commanding Officer and the Area HQ saying that, "A warrant of arrest for the Officer is being issued". NOW, there was total commotion in the station and I was positively terrified, having night mares of being hauled away in handcuffs!! I was pushed out of Jabalpur as fast as possible along with my infant son and his maid.

When I reached the court in Dehradun (in uniform) very apprehensive, the Court was still being cleaned and swept. Some people who saw me, rushed to tell me "Thank God you have come—there has been a lot of discussion about why Army Officers cannot be charged with Contempt of Court!!" Since I had reached early, I was able to get hold of the relevant files. The case pertained to a brutal attack on a Senior Supervisor of the Ordnance Factory by workers who had attacked him with knives and sharp implements and left him almost dead. This had happened almost three years earlier. As Duty Medical Officer I had examined him, had stitched him up in the Operation Theatre along with our senior colleagues and had also submitted the report to the Police. Going through these files helped me to recall all details. This supervisor had continued to be admitted in the Surgical Ward where I was Medical Officer Incharge. When the District Magistrate met me before the hearing, he asked me why I had taken so long to come. I explained to him that, for me, a trip to Dehradun meant coming 'home' but I couldn't travel unless the higher headquarters gave me permission to move. The case hearing went through satisfactorily and I was able to answer all questions as an Expert Medical witness very confidently (having read scores of Perry Mason Courtroom Dramas). Finally, the order about the Arrest Warrant was cancelled and I was able to breathe!!

Another incident, (rather embarrassing) cannot be forgotten. During my first Annual Leave I came from Dehradun to Delhi and was issued a Military Railway Warrant (IAFT 1752) which was exchanged for a Check Soldier's Ticket (CST). Along with the ticket, the counterfoil of the Warrant was also returned to me. At Delhi I was received, with much excitement, by Ved and we merrily proceeded home. Two months passed in sheer bliss and then, I was ready to return to my place of posting.

On our way to the Railway Station, Ved asked, "I hope that you are carrying your ticket". TICKET! What ticket? I have nothing, just the counterfoil of my Warrant" I exclaimed. "But, where is your Check Soldier's Ticket", he asked. I then recalled that I had handed it over to the Ticket collector, two whole months ago. How was I to know that it was to be retained for my return journey? What was done could not be undone. To my great relief, my berth was reserved and the warrant and ticket numbers were indicated on the chart. The ticket checker came, tallied the numbers with my counterfoil and moved on. My heart took some time to stop jumping and then I slept peacefully without any premonition of impending doom!!

Next morning, at Raiwala, just short of my final destination, there was a surprise check and within minutes a whole team of Ticket Checkers appeared. Again, I pulled out my warrant. But this time there was no luck. "You'll have to see the District Magistrate since there is a Mobile Court on the platform", the officer said sternly. I gulped, my legs were trembling but with outwardly supreme, unassailable confidence I marched to the District Magistrate, pulled out my identity card and my Warrant and told him that I was travelling on a free Warrant but had accidentally misplaced my ticket. Without taking a second he said, "Please carry on, sorry for the trouble". That was the happy end to my encounter with the Mobile Railway Court! Even now I think of it as one of my most agonising experiences.

After completion of my tenure at Jabalpur I did ask if I could be posted to Wellington where my husband had now been posted after two years in Mizoram. But this was not agreed to. So after completing five happy years in the army, I asked to be released, rather regretfully.

Even now, 41 years later, I can say emphatically that I thoroughly enjoyed my stay as a Short Service Commissioned Officer in the Army Medical Corps. I was given full respect, given credit for my work and the working environment was conducive to giving one's best to the organisation. As I look back, I would place most of my senior officers on a pedestal. There was so much to learn from them. My colleagues were friendly, courteous and helpful. I am in touch with some of them even now.

The only problem that one faced was not being posted to the same station as my husband. One can understand when the spouse is in an operational area; but to be denied a posting together when it is possible, is difficult to comprehend. Fortunately, today there are considerations such as 'spouse posting' which make things easier to some extent.

* **Dr Ranjana Malik** was commissioned into the Army Medical Corps (AMC) on 22 Jan 1968 and served in AMC till 21 Jan 1973. She got married to Major (later General) Ved Malik, former Chief of Army Staff, in Sep 1968. At present, she is one of the founder members of the 'Society for Meritorious Students' which funds the education of almost 1000 needy children. She is also an executive member of Retired Defence Officers' Wives' Association and keeps in touch with martyred soldiers' families.

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1962 - The Battle of Namka Chu and Fall of Tawang (A View from other Side of the Hill)

Major General PJS Sandhu (Retd)*

Author's Note

In an earlier Issue of USI Journal (Oct-Dec 2011), I had covered the battles of Se-La and Bomdi-La which had been reconstructed primarily from Chinese literature. Subsequently, some more Chinese material has become available which has enabled me to also analyse the initial battle on the Namka Chu and the fall of Tawang. This completes the narrative of operations in the Kameng Sector during 1962 war.

Prelude

By the end of 1950s and the beginning of 1960s, the PLA had shifted its strategic focus from Ladakh to NEFA (now Arunachal Pradesh). By constructing the road connecting Xinjiang to Tibet through Aksai-Chin (completed in 1957) and securing it by establishing border posts across the road to give it sufficient depth, the Chinese had by and large achieved their aims in the Western Sector. They now turned their attention to the Eastern Sector. However, before initiating any armed action, they wanted to make sure that the international environment, if not friendly, was at least not hostile to them.

Their main concerns were the attitude of the erstwhile Soviet Union and the USA. The USA was locked with the Soviet Union in the Cuban missile crisis and had little interest in the Sino-Indian affairs. At the same time, the Soviet Union while in confrontation with the USA, wanted China on its side to be able to jointly deal with America. Hence, as a measure of expediency the Soviet Union changed its attitude towards the Sino-Indian border dispute. On 13 and 14 Oct 1962, Khrushchev conveyed to the Chinese ambassador in Moscow a message on the following lines ¹ :-

"The information received by the Soviet Union regarding India preparing to launch an attack on China is same as conveyed by China. Had Soviet Union been in place of China, it would have also adopted similar measures. On Sino-Indian border issue, an attitude of neutrality cannot be adopted and if someone is attacking China, neutrality on our part will be like a traitor's behavior".

This was perhaps the last time that the Soviet Union took a pro-China stance as far as Sino-Indian border dispute was concerned.

There was one more concern that the Chinese had, i.e. Taiwan taking advantage of a Sino-Indian conflict by initiating its own military action against the mainland. However, the Americans had unsuspectingly conveyed to the Chinese during the ambassadorial level talks in Warsaw that Taiwan had been restrained from taking any such action.²

Having secured the international environment, the Chinese leadership seem to have made up their mind in early 1962 to strike a hard and painful blow. Chairman Mao Zedong is reported to have said, "India made us suffer for three years, starting from 1959, 1960 and 1961; only then in 1962 we struck back".

By about July 1962, the negotiations between the Chinese and the Indian Government at political and diplomatic levels had reached a dead end. On 26 Jul 1962, soon after the meeting between Marshal Ch'en Yi and Mr Krishna Menon in Geneva, the Indian Government offered to send a ministerial level delegation to Beijing to discuss, without preconditions, all bilateral problems and disputes. The Chinese Premier Chou En Lai in a midnight meeting with the Indian Charge d' Affairs, Dr PK Banerjee on 04 Aug 1962 conveyed that China was willing to hold talks only on China's terms. In the words of Shri Sudharshan Bhutani, IFS (Retd) who was posted in the Indian embassy in Beijing from 1957- 62 "the door had been slammed shut".³

Hereafter, the relations deteriorated swiftly. The Eastern Sector (then known as NEFA) which had comparatively seen little activity till then came into prominence. The first manifestation was the Chinese reaction to the Indian post of Dhola which had been established in the area of Thagla Ridge by Assam Rifles in early June 1962. The Chinese reaction on 08 Sep 1962 though long in coming, was deliberate and massive, and was a forerunner of the events that followed. The Dhola confrontation began on 08 Sep 1962 and culminated in a major Chinese offensive on 20 Oct. This article attempts to reconstruct the battles in the Kameng Sector from Sep 1962 onwards till the fall of Tawang which was a prelude to the operations launched by the Chinese in Nov 1962. This narrative is in three parts as under :-

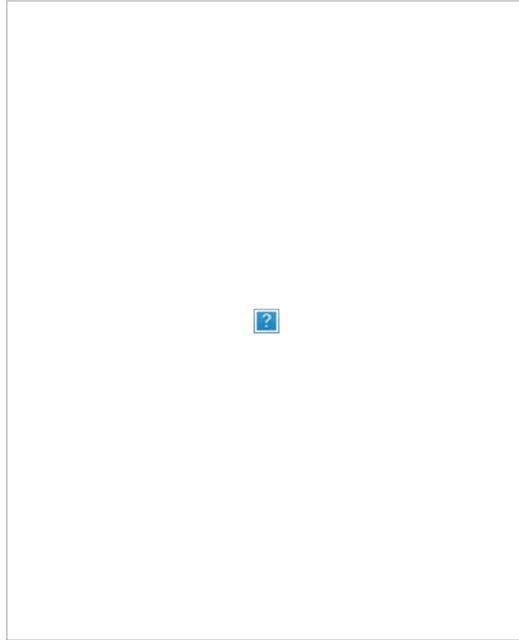
- (a) Part I - The Confrontation at Dhola.
- (b) Part II - The Battle at Namka Chu.
- (c) Part III - The Fall of Tawang.

Part I - The Confrontation at Dhola

It is generally believed that the war in the Eastern Sector was triggered by the Dhola incident in Sep 1962. It is doubtful if the war could have been prevented even if Dhola Post had not been established by India. However, wars always require some incident to act as a trigger and so Dhola may well have been that trigger.

Dhola Post was established by a platoon of 5 Assam Rifles on the southern bank of Namka Chu in the vicinity of Bridge III in early June 1962. Please refer to Sketch 'P'. An officer from 1 SIKH (Captain Mahavir Prasad) was deputed initially to assist in setting up of the Post. The Post was commanded by a Junior Commissioned Officer (JCO) who was reporting to his superiors through normal channels of Assam Rifles. Assam Rifles at that time were under the control of the Ministry of External Affairs. HQ 7 Infantry Brigade, though responsible for defence of the Kameng Sector,

was not in the chain of command of this platoon at Dhola.⁴ However, they were required to provide assistance in case of a Chinese reaction. HQ 7 Infantry Brigade was located at Tawang along with its two battalions 1/9 GORKHA RIFLES and 1 SIKH. There was no road beyond Tawang and the post at Dhola was supplied by porters. Tawang was the road head for 1 ton vehicles. The marching distance from Tawang to Dhola on the Namka Chu, though only about 22 kms, was three days march, either over Karpola I Pass (16,000 feet) or, over Hathungla Pass (13,500 feet).



The Indian version of the events is generally well known. The account given by Brigadier JP Dalvi in his book 'Himalayan Blunder' which is based on his first hand experience as Commander 7 Infantry Brigade appears to be quite authentic. It will be worthwhile to recount the main events as known today from early 1961 till 20 Oct 1962, i.e the day the Chinese launched their attack against Indian positions on the Namka Chu. These are :-

- (a) Brigadier Dalvi on assuming command of the brigade in Mar 1962 inherited the following tasks ⁵ :-
 - (i) Defend Tawang - the primary role.
 - (ii) Prevent any penetration of the McMahon Line.
 - (iii) Establish Assam Rifles post; and
 - (iv) Assist Assam Rifles posts.
- (b) The Chinese during their talks had raised a dispute about the exact alignment of the McMahon Line in the area of Thagla Ridge. Hence, Thagla Ridge became a disputed area. The Chinese had earlier also objected to the establishment of an Assam Rifles Post at Khenzamane in 1959 by surrounding it and then withdrawing after a few days.
- (c) In order to secure the boundary as perceived by India, 7 Infantry Brigade was ordered to establish an Assam Rifles post of a platoon strength in the area of Thagla Ridge. This post was called 'Dhola' and was established by 04 Jun 1962. In the event, the post was actually established on the southern bank of Namka Chu as this was the only place which was free of snow and for administrative reasons, such as availability of water and easier accessibility for replenishment parties.⁶ Undoubtedly, siting of the post was tactically unsound.
- (d) There was no visible reaction from the Chinese to the establishment of Dhola Post till 08 Sep. On 08 Sep, Dhola Post was reportedly surrounded by 600 Chinese, a number that kept varying between 60-1200 in subsequent days.
- (e) 7 Infantry Brigade was ordered to relieve Dhola Post. Further, the Post was to hold out at all costs.
- (f) A detachment of 9 PUNJAB located at Lumpu was immediately ordered to move via Hathungla Pass and establish contact with Dhola. Rest of the battalion was placed on four hours notice to be prepared to move to Lumpu to establish a firm base and man the Dropping Zone (DZ).
- (g) Simultaneously, HQ Eastern Command located at Lucknow also issued orders on 10 Sep for 7 Infantry Brigade to be prepared to move forward and deal with the Chinese investing Dhola. At this stage, 1 SIKH having been detached to Tawang Sector, the Brigade had only one battalion, i.e. 9 PUNJAB, as the other two battalions, 1/9 GORKHA RIFLES and 2 RAJPUT were still moving up from Misamari.
- (h) By the end of Sep, 7 Infantry Brigade was deployed on the Namka Chu in a linear fashion from Tsangle in the West to Bridge I in the East, a distance of nearly 20 kms and under direct domination of the Chinese on the Thagla Ridge. The Brigade had been tasked by the 'highest political authority' to throw the Chinese out from Thagla Ridge.

This was the setting till Lieutenant General BM Kaul, the newly appointed GOC IV Corps arrived (by helicopter) on the scene on 05 Oct 1962 and put into motion the actions to evict the Chinese from Thagla Ridge. He ordered the troops to get a 'move on' (to Namka Chu) without even waiting for the Brigade Commander to arrive who reached Dhola only on the afternoon of 07 Oct.

Kaul apparently was under some sort of pressure to do something (to evict the Chinese) by 10 Oct. Accordingly, he ordered 2 RAJPUT to move to Yumstola (16000 feet) on the Thagla Ridge, to sit behind the Chinese. However, after strong remonstrations by the Commanding Officers (COs), the Brigade Commander and the General Officer Commanding (GOC) of the Division, the order was changed to send a company strength patrol of 9 PUNJAB under Major Chaudhry to occupy Tseng-Jong (a herder's hut approximately half way to the top of Thagla Ridge) on 09 Oct to ascertain the Chinese reaction to our crossing the Namka Chu. They left small detachments on the crossing places on Namka Chu and reached Tseng-Jong before dusk on 09 Oct. 2 RAJPUT was to be in readiness to move to Yumstola the next day after the Chinese reaction was known.

The 9 PUNJAB patrol, approximately 50 strong was attacked by a battalion of the Chinese at 0500 hours (IST) on 10 Oct. The Punjabis managed to repulse the first attack but were overwhelmed in the second attack by sheer numbers. They were without any artillery or even mortar support. Soon they ran out of ammunition as they had carried only pouch ammunition. Major Chaudhry was wounded but continued to lead his men with great determination and courage.

The Punjabis suffered six dead including one officer and eleven wounded. The Chinese admitted to have suffered 11 killed and 22 wounded. However, on this day the Chinese allowed the Indians to withdraw and even carry their wounded without interference. They even cremated our dead. All this was watched by Indian troops deployed on the Namka Chu with amazement.

Lieutenant General Kaul saw for himself the Chinese attack develop and was badly shaken. His first reaction was - "Oh my God, you are right, they mean business".⁷ Shortly thereafter, he left for Delhi. However, before leaving, he ordered 7 Infantry Brigade to continue to hold their positions on the southern bank of the Namka Chu and ensure security of the crossings at all costs. The stage was now set for the events that were to unfold on 20 Oct. The irony of the situation was that the Indian troops on the Namka Chu could all along see the Chinese reconnaissance, deployment and preparations opposite them on the Thagla slopes but could do nothing, except to wait for the trap to be sprung, while the authorities in Delhi still made plans to throw the Chinese out!

Part II - The Battle of Namka Chu⁸

China Prepares

On 29 May 1962, HQ General Staff of the PLA based on a directive from the Central Military Commission (CMC) issued firm instructions to the Tibet Military Command to plan military operations on the Sino-Indian border. These instructions set into motion a chain of events that were to end in the massive attack on 20 Oct 1962. Some of the important actions are listed below :-

- (a) A forward HQ of Tibet Military Command which was to command all operations in the Eastern Sector was formed. This forward HQ was designated as Zang Zi 419 (Force 419) and was established at Lhasa on 11 June 1962.
- (b) Force 419 (equivalent of a division) had under its command 154, 155 and 157 Infantry Regiments, and some other combat support elements. Their main task was to prevent any further Indian encroachments in Tawang Sector.
- (c) Another Force under Huo Guang, Deputy Political Commissar of the Chengdu Military Region was tasked to prevent any Indian ingress from Sikkim towards Gyantse and Yatung (Chumbi Valley).
- (d) 11 Infantry Division was independently made responsible to prevent any Indian encroachments in the eastern part of Arunachal Pradesh, i.e. less Kameng Sector.

In addition to the above, the CMC asked Tibet Frontier Forces to make preparations to resume patrolling which had been halted a few months earlier. In response to the setting up of Dhola Post by India in early Jun 1962, GHQ PLA issued instructions regarding measures for "strengthening Sino-Indian Eastern Front and military posture in the Central Sector". On 06 Sep 1962 Gouzhi Xian, the Deputy Commander of Shannan Military District and Shi Zong Kuan, the Political Commissar of 2 Infantry Regiment alongwith the 3rd Company of this Regiment entered into the Namka Chu area (this was probably the force that was reported by Dhola Post Commander to have surrounded the Post on 08 Sep). Later they set up posts along the northern bank of the Namka Chu and were face to face with the Indian troops at Dhola which was on the southern bank in the area of Bridge III.

The formations and units of the PLA which had been selected to undertake the operations were also put through focused training commencing in Jun 1962. On 05 Jun, the Tibet Military Command issued detailed instructions regarding training to be carried out by various units. The units were required to practice quick mobilisation and rapid movement to designated operational areas. Priority was to be given to those skills which were required for defensive and offensive operations in the mountainous and jungle terrain. Special attention was to be paid to providing fire support in mountainous terrain, to meet a counter attack, demolition of bunkers, breaching obstacles, assembly and advance under fire. A large number of personnel in units were also trained in handling of explosives. The tactical training of cadres (commanders) in relation to the pending operations was also upgraded through training exercises at unit and regimental level. Force 419 and 32 Infantry Regiment were also given an in-depth exposure about the Indian strength, organisations, deployment and tactics.

As operations were to be conducted in high altitudes areas, a lot of emphasis was laid on acclimatisation and familiarising with the mountainous environment, lacking in oxygen and the prevailing adverse climatic conditions.

Troops were trained in first aid, casualty evacuation and treating frostbite cases. Each unit was tasked to carry out ground reconnaissance and conduct sand model discussions of their operational tasks, and only thereafter formulate their concrete plans. Operational plans were also rehearsed at unit and sub-unit level so that every soldier had a clear idea of his role in the battle. The aim of pre-battle training was to fully prepare individual soldiers, units and formations for the impending tasks and to inculcate among them a sense of confidence. The emphasis was on 'winning the first battle of the war'.

The CMC and the GHQ of the PLA took pains to especially get the units combat ready. Key appointments were specially selected and a proportion of officers, NCOs and soldiers with combat experience in previous wars (War of Liberation, Korean War, suppression of Tibetan rebellion etc.) were inducted into units. For example, in Force 419, as many as 273 cadres (commanders) at various levels were adjusted, which constituted 32.4 per cent of the overall strength. Such adjustments were carried out in all the battalions and regiments creating an elite core of experienced troops which would prove to be a stabilising influence in times of crisis.

All the units were instructed to carry out battlefield reconnaissance to understand the topography and dispositions of Indian troops. Beginning Oct, the Deputy C-in-C of the Tibet Military Command Zhao Wesijin, leading Commanders of the Force 419 above regimental level went to mountain passes to carry out a detailed reconnaissance of the ground and deployment of Indian forces in the Namka Chu valley before formulating their final plans.

By the end of Sep, the CPC Central Committee and the CMC had concluded that a military clash was unavoidable. All key commanders and staff who were on leave or away on duty were ordered to return to Tibet. The C-in-C of Tibet Military Command who was on leave (in Beijing) and his Chief of Staff who was already in Beijing were briefed by the Party Central Committee and senior members of the CMC. They returned to Lhasa on 12 Oct. The Forward HQ of Tibet Military Command and HQ Force 419 moved to Mama on 14 Oct 1962. Mama is located in Nyam Jang Chu Valley, approximately 15 kms North of Khenzamane.

As the operations were to be conducted in difficult terrain, far removed from the Chinese mainland, logistics preparations were given heightened importance. Tibet Military Command had built stocks of upto 445 tons of various war like stores at their forward bases, like Cuona, Longzi and Chayu before the war. Food stocks were built up to sustain a force of one division for upto 40 days of active operations. Due attention was also paid to develop road communications to the border areas. Road head was developed right up to Le Camp just North of Bumla. Powerful transmitters were set-up close to the border. Each border post was equipped with a radio station of 200 Watt. Some important locations were equipped with radio stations of 1000 watt which enabled them to communicate directly with the GHQ of the PLA during battle.

The CMC was also concerned about some internal disturbances in Tibet during the campaign. In order to cater for such a contingency, the CMC ordered the move of 130 Infantry Division of the 54th Army from Sichuan Province to Tibet and await further orders. Similarly, 134 Infantry Division, also of the 54th Army stationed in Nanchong Region was to remain in readiness and await orders for move into Tibet.

Chinese Order of Battle. The forward HQ of Tibet Military Region which was responsible to conduct operations in Tawang Sector had the following troops available to it :-

- (a) Force 419 (154, 155 and 157 Infantry Regiments).
- (b) 11 Infantry Division (31, 32 and 33 Infantry Regiments). It seems that only one battalion of 31 Infantry Regiment was available for this operation.
- (c) 2 Infantry Regiment ex Shannan Military sub-district (SMS).
- (d) 308 Artillery Regiment (two companies).
- (e) A part of 136 Engineer Regiment.

Concept of Operations. The concept of operations was to attack from both flanks with the main thrust being delivered from the left flank of the Indian Forces deployed on the Namka Chu. Simultaneously with the above, the Indian positions were to be outflanked from the eastern flank to cut off their route of withdrawal, while pinning them down from the front. Indian forces were to be split into many pockets and were to be destroyed in detail.

The Plan. Please refer to Sketch 'P'. 155 Infantry Regiment and one battalion of 157 Infantry Regiment of Force 419 were to launch the main attack from the left flank of the Indian forces between Bridge IV and Bridge V and roll up the left flank; namely, 2 RAJPUT positions on the Namka Chu. The main body of 157 Infantry Regiment less one battalion was to outflank the Indian positions from the West and attack Tsangdar directly which was the DZ as also the forward logistics base for 7 Infantry Brigade. 154 Infantry Regiment of Force 419 was to attack the right flank and destroy Indian forces deployed at Khinzemane and Dhola. 2nd Battalion of 32 Infantry Regiment ex 11 Infantry Division along with elements of SMS were to pin down the Indian forces from the front. The main force of 32 Infantry Regiment (less one battalion) along with 2nd Battalion of 31 Infantry Regiment ex 11 Infantry Division were to be located as reserves in the Area Le - Cuona (15-20 Km North of Bumla).

Supporting Operations. In conformity with the above attacks, Chengdu Sub Command had been ordered to launch feint attacks by two battalions towards Bumla, Longju and the areas East of it to confuse the Indian Forces. In addition, HQ 11 Infantry Division with its 33 Infantry Regiment was ordered to be a reserve in the area of Cuona and await further orders. Simultaneously, Xinjiang Military Command was ordered to undertake offensive operations to eliminate Indian posts in the Western Sector in coordination with the main attack in the Eastern Sector (Tawang Sector).

The Battle

The attack on the Namka Chu positions commenced in the early hours of 20 Oct at 0545 hours (IST).⁹ It was preceded by 15 minutes of intense bombardment. The Chinese had infiltrated through Indian positions on the Namka Chu during the night as there were large gaps. They had thus occupied higher ground behind Indian defences and were attacking downhill. The Indian defenders were thus forced to turn around and face the attack. As the Indian telephone lines ran along the Namka Chu these had also been cut during the night. The only communication available between the battalions being attacked and HQ 7 Infantry Brigade was the B1 Net (Brigade Command Net). Soon the B1 detachments of the battalions were either killed or taken prisoner and HQ 7 Infantry Brigade itself was overrun, the B1 Net also became non-functional. By about 0800 hours, the Brigade HQ was not in communication with any of its battalions. The situation is best captured in the words of Brigadier (then Captain) Lakshman Singh, Officer Commanding the Brigade Signal Section (in military parlance referred to as 'Sparrow'). I quote¹⁰ :-

"This was the end of the Brigade Command Net and also the Command of the Brigade as there was no one left to be commanded and no means to command.....The Brigade having lost both command and control could do little to influence the battle.

Operations on the Western Flank

The main force of the attack by the 1st and 2nd Battalions plus 8th Company of 155 Infantry Regiment was borne by the left flank of the Indian positions held by 2 RAJPUT in the area of Log Bridge, Temporary Bridge and Bridge IV (Chinese called this complex Qiang Deng and Ke Long) which found themselves being attacked from many directions. The Chinese had infiltrated to southeast of Indian positions, dividing the defences of 2 RAJPUT in two halves and progressed their attack northwards (downhill), tackling Indian positions piecemeal. Third Battalion of the Regiment less 8th Company was held in reserve. After the capture of Qiang Deng and Ke Long, the idea was to develop the attack eastwards towards Dhola which was held by a company of 9 PUNJAB and a platoon of 5 Assam Rifles. There was considerable hand to hand fighting. Chinese also used flame throwers to neutralise the machine gun bunkers. 2 RAJPUT fought valiantly but were not able to give a coordinated battle because command and control had been lost and their defences had been penetrated. The casualties suffered by 2 RAJPUT bear testimony to the heroic fight put up by them against overwhelming odds. Against their overall strength of 513 all ranks deployed on the Namka Chu, they suffered 282 killed, 171 taken prisoner which included 81 wounded - there were only 60 survivors. CO 2 RAJPUT Lieutenant Colonel Rikhy and CO of 4 Infantry Division Signal Regiment Lieutenant Colonel Tiwari (who was manning the B1 net of the battalion till the last) were taken prisoners. The Chinese battalion (2nd Battalion 155 Infantry Regiment) which had attacked in the first phase suffered 21 killed and 34 wounded. 1st Battalion 155 Infantry Regiment which had attacked in the second phase suffered 59 killed and 79 wounded. The Chinese casualties also indicate the tough resistance put up by the defenders. The battle had lasted for about three hours.

Operations on the Eastern Flank

Simultaneously with the operations on the western flank, 154 Infantry Regiment of Task Force 419 was given the task of attacking the eastern flank of Indian forces (7 Infantry Brigade); namely, at Khenzemane (established in 1959), advance along Nyam Jang Chu, destroy Drokung Samba Bridge and cut off the route of withdrawal of Indian forces to Ziminthaug. Zhou Zhong was the Commander of 154 Infantry Regiment. He assigned 3rd Battalion for the main attack on Khenzemane. The 2nd Battalion was tasked to bypass and go straight for Drokung Samba Bridge. The 1st Battalion was to roll up the eastern flank of Indian positions on the Namka Chu in the area of Bridges I and II.

This attack too commenced at 0545 hours (IST) and was preceded by 15 minutes of intense shelling. The 3rd Battalion attacked Khenzemane Post from the northwest direction in echelons, while simultaneously encircling the post. The attack continued till the Drokung Samba Bridge where 2nd Battalion was already in position on the heights, effectively dominating the bridge by fire. The bridge was subsequently destroyed by the Chinese, thus cutting off the route of withdrawal. The attack was supported by concentrated fire of the Artillery Group consisting of 21 X 82 mm mortars, 3 X 75 mm recoilless guns and 2 X 120 mm mortars ex 11 Infantry Division. For some reason (possibly over cautiousness on the part of the battalion commander), the attack by the 1st Battalion against the eastern flank on the Namka Chu got delayed till 1800 hours on 20 Oct, hence Indian troops deployed in the area of Bridges I and II, and junction of Namka Chu and Nyam Jang Chu i.e 9 PUNJAB (minus) and 4 GRENADIERS could withdraw in reasonably good order.

Capture of Tsangdhar

As per Chinese perceptions, Tsangdhar which lay about six km South of Namka Chu was located North of McMahan Line. It was a forward logistics base for 7 Infantry Brigade and also a DZ for airdrops. It was held by one company of 1/9 GR. On the morning of 20 Oct, 1/9 GR less two companies were preparing for move to Tsangle as per orders from Lieutenant General BM Kaul. So, in effect, on the morning of the attack (20 Oct), Tsangdhar was defended by one company of 1/9 GR which was deployed on a hill top West of Tsangdhar. Chinese appreciated that outflanking and capture of Tsangdhar would not only make the Indian defences on the Namka Chu untenable but would also effectively block any reinforcements coming from the direction of Lumpu.

The task for capture and outflanking of Tsangdhar was assigned to 157 Infantry Regiment of Force 419, commanded by Li De Rong. He in turn tasked the 1st Battalion reinforced by No. 8 Company for capture of Tsangdhar by an outflanking move from the West. The battalion crossed Namka Chu in its upper reaches, advanced cross country in a single file for about 12 hours and reached their assigned positions for attack northwest of Tsangdhar by first light 20 Oct. The battalion outflanked the Indian positions from the South by a company and attacked from the West with two companies while holding a company in reserve. Guns deployed about 500 m to the northwest of Tsangdhar provided effective fire support. By about 1300 hours, the battle of Tsangdhar was over. In the meantime, the main body of 157 Infantry Regiment had crossed Namka Chu and advanced quickly towards Tsangdhar and occupied the mountain passes leading out from this area. Lt Col Ahluwalia, CO 1/9 GORKHA RIFLES and 492 other ranks of the battalion were taken prisoners.

Simultaneously with the above, 32 Infantry Regiment of 11 Infantry Division alongwith elements of SMS who were providing the firm base on northern bank of Namka Chu advanced and relieved the troops of Force 419 on the Namka Chu to enable them to carry out mopping up operations. Later, 32 Infantry Regiment attacked Hathungla Ridge and occupied the same by first light 21 Oct. By the morning of 21 Oct, the battles of Namka Chu, Tsangdhar and Hathungla were over and the Indian 7 Infantry Brigade had ceased to be an effective fighting force. Two of the COs had been taken prisoners. Lieutenant Colonel Rattan Singh CO 5 Assam Rifles was also taken a prisoner.

Part III - Fall of Tawang (22-24 Oct 1962)¹¹

Preliminary Operations. After the battle of Namka Chu, taking advantage of disorderly retreat, the CPC Central Committee ordered its forces to strike even a greater blow to the Indian forces. Accordingly, at 1900 hours (IST) on 20 Oct, they ordered their forces to consolidate their gains, cross McMahon Line (so far they perceived themselves to be evicting Indian troops from North of McMahon Line) and capture Lumpu-Ziminthaung, thus creating favourable conditions for capture of Tawang in the next phase.

Forward HQ of Tibet Military Command ordered pursuit operations to commence at 1600 hours (IST) on 21 Oct. The outline plan was as under :-

- (a) 157 Infantry Regiment plus 3rd Battalion ex 155 Infantry Regiment were to advance along the western flank from Tsangdhar to Karpola I and on to Lumpu.
- (b) HQ Force 419 with 154 Infantry Regiment leading and 155 Infantry Regiment less 3rd battalion were to carry out pursuit along the main Axis Hathungla - Serkhim - Lumpu.
- (c) One company from 2nd Regiment of SMS was to advance along the eastern bank of Nyam Jang Chu to Ziminthaung where tactical HQ of Indian 4 Infantry Division was located.

Having secured Lumpu and Ziminthaung, Forward HQ of Tibet Military Command at 1630 h (IST) on 22 Oct, ordered troops ex SMS to capture Bumla and exploit towards Tawang. Bumla was held by a platoon of 5 Assam Rifles and a platoon ex 1 SIKH (deployed slightly in depth) with the remainder Company of 1 SIKH deployed at Tongpeng La.

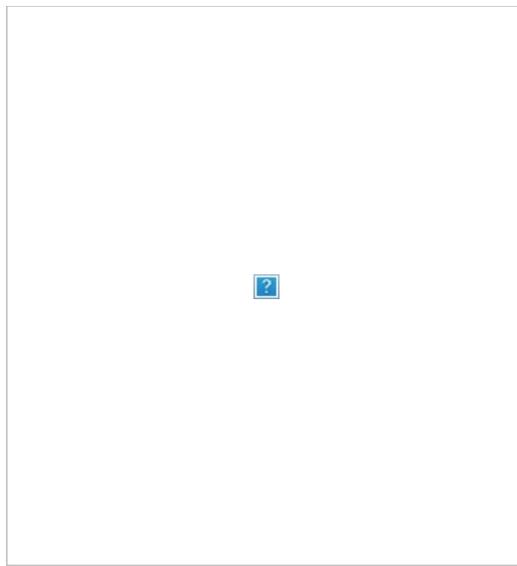
For the Capture of Bumla, HQ SMS tasked three companies of the 3rd Infantry Regiment with an artillery company and elements of Frontier Guards; placing all of them under the command of the Deputy Commander of SMS - Guozhi Xian. In outline, the plan was to outflank the Indian positions from the West using one company in order to sever the link between the Assam Rifles platoon and the 1 SIKH platoon. The other two companies were to launch the main attack against Bumla from southeast direction.

The attack commenced at 0500 hours (IST) on 23 Oct and faced stiff opposition from the 1 SIKH platoon under Subedar Joginder Singh, PVC (posthumous). However, the position was overwhelmed after three attacks. The attacking troops had to call for reinforcements from 33 Infantry Regiment and readjust their plans. Having eliminated the 1 SIKH platoon at Bumla, 33 Infantry Regiment troops continued their attack against the 1 SIKH company at Tongpengla which managed to make a clean break and withdraw to Jung in good order. At first light on 24 Oct, four companies ex SMS resumed their advance towards Tawang.

At this point of time, Tawang was defended by 1 SIKH, 4 GARHWAL RIFLES, one artillery regiment, an engineer detachment, all under the command of Brigadier Kalyan Singh, Commander 4 Artillery Brigade. As per Chinese estimates Tawang had a total strength of about 2700 troops.

Please refer to Sketch 'Q'. The plan involved advance along three different routes and finally culminating in a three pronged attack on Tawang. Force 419 (comprising three infantry regiments), 11 Infantry Division and four companies ex SMS (roughly a total strength of six infantry regiments) were tasked for capture of Tawang. The outline plan was as under :-

- (a) Main force consisting of Force 419 was to advance from Lumpu via Lumla and capture Tawang in coordination with units of 11 Infantry Division.
- (b) 1st Battalion of 31 Infantry Regiment was to advance from Takson Gompa via Gangshen Pass directly on to Tawang and assist the main Force 419 advancing from the West for capture of Tawang.
- (c) 33 Infantry Regiment of 11 Infantry Division was to advance along the eastern flank from Bumla via Mukdong La directly on to Tawang Chu and cut off the route of withdrawal of Indian troops deployed at Tawang, as also prevent any reinforcements coming from Derang Dzong.



(d) 32 Infantry Regiment of 11 Infantry Division and four companies of SMS were to advance on the main Axis Bumla - Tawang via Milakteng La and coordinate their actions with both the forces advancing on the western and eastern flanks.

The advance to Tawang started at first light on 23 Oct and by last light 23 Oct Tawang had been surrounded and came under attack from many directions. There was no coordinated resistance from the defenders and by first light 24 Oct Tawang was occupied by the Chinese. They now controlled all areas North of Tawang Chu in the Kameng Sub Division.

It would be seen from the above that the Chinese had used bulk of their forces (four regiments out of a total of six regiments) to outflank and encircle Tawang, as also cut off the route of withdrawal and prevent reinforcements. Only about one third of the forces were used for direct advance on to the objective. This was typical of the tactics that Chinese were to employ even in the subsequent battles at Se-La and Bomdi-La.

Casualties

As per the Chinese accounts, in the operations conducted in the Tawang Sector so far, they had killed 832 Indian troops and taken 1065 men as prisoners, a total of 1897 all ranks. The Chinese had lost 151 killed (16 officers and 135 men) and 334 seriously wounded (30 officers and 304 men).¹² In addition, they had captured vast quantities of arms, ammunition, vehicles and equipment.

Conclusion

It would seem that by early 1962 Chinese had made up their mind to launch a large scale military operation and deliver a crippling blow to the Indian Army. While their main objectives lay in the Western Sector (Ladakh), it was in the Eastern Sector (Kameng Sub Division of NEFA) that they decided to launch their major effort as the terrain there facilitated employment of large forces. The 1959 rebellion in Tibet had necessitated movement of additional PLA troops into the Tibetan Autonomous Region and these formations were already available in Tibet, fully acclimatised and bloodied for combat.

In the Kameng Sector, the establishment of Dhola Post by India during early June 1962 proved to be the trigger. The first phase of operations was aimed at annihilation of Indian troops deployed on the Namka Chu in a linear fashion and the capture of Tawang. The attack on Namka Chu was carried out from both flanks with the main thrust being delivered from the western flank. Simultaneously, Indian positions were infiltrated (as there were large gaps) and divided into smaller bits for piecemeal destruction. The destruction of the Brigade was a foregone conclusion. After a pause of about 48 hours, operations were resumed for capture of Tawang. This time it was planned to encircle Indian positions, cut-off routes of withdrawal and launch multidirectional attacks.

After the destruction of 7 Infantry Brigade there was no effective formation responsible for defence of Tawang. The morale of Indian troops was also low. The adhoc troops under Commander Artillery of 4 Infantry Division were ordered to withdraw and Tawang fell without a fight by 24 Oct . The stage was now set for further operations towards Se-La and Bomdi-La.

If one was to ascribe a single reason for the debacle on the Namka Chu and fall of Tawang, it would be - a faulty battle plan with poor generalship, made worse by political interference. The troops fought valiantly against overwhelming odds. The casualties suffered by 7 Infantry Brigade units are a testimony to that. Let no one fault the Indian soldier for gallantry, even in hindsight.

Endnotes

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***Major General PJS Sandhu (Retd)** was commissioned into 8th Light Cavalry on 15 June 1966 and later commanded 47 Armoured Regiment. He retired from the Army as Chief of Staff, 1 Corps on 31 July 2003. Presently, he is working as Deputy Director and Editor at USI since 01 May 2007.

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Indian Wars - As Seen Through Soldiers' Eyes (Based on their personal experiences)

My Experiences in 1947-48 War in J&K

Major General Lachhman Singh Lehl, PVSM, VrC (Retd)*

Background

On 20 February 1947, the British Government announced its intention to transfer power not later than June 1948. On 3 June 1947, Lord Mountbatten, a man in hurry and the new Viceroy, announced the partition of British India into the Dominions of India and Pakistan by 15 August 1947. The Partition of India resulted in splitting up of the Indian Army and consequently the division of Royal Indian Artillery (RIA). In early 1946, the gunners had reorganised the RIA into one class regiments - 8½ out of 27 Artillery units went to Pakistan. Large scale communal disturbances on both sides hastened the evacuation of Indian Artillery units out of Pakistan.

During October 1947, Pakistan organised tribals invaded Kashmir. The Indian Army undertook to throw out the raiders at short notice. The defence of the besieged towns of Poonch and Skardu, defence of Naushera and recapture of Jhangar and the capture of Zoji la and Kargil will forever remain the epics of this campaign. I had the good fortune of taking part in most of these actions.

Introduction

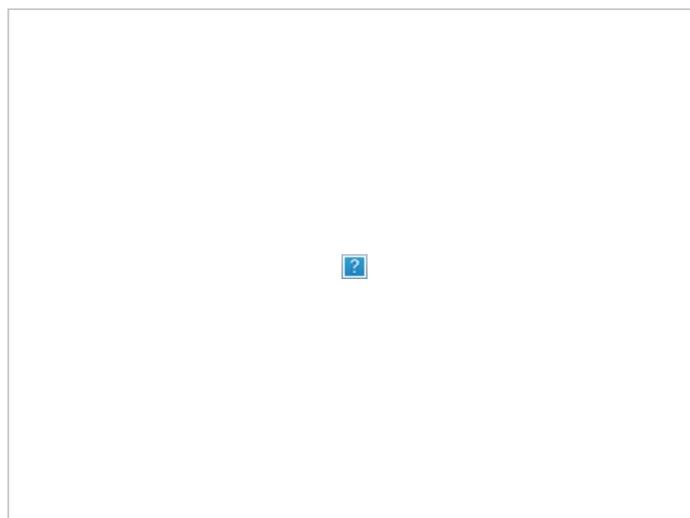
On 12 August 1947, my British Commanding Officer (CO), of the Punjab Mussalman RIA unit located at Rawalpindi, sent me on two months annual leave, during which I got posted to 11 Field Regiment at Pune. On arrival, I reported to Lieutenant Colonel (later Major General) SJ Sathe, the first Indian CO of the unit. He instructed me to leave for Pathankot the next day as OC Advance Party. By the end of the October 1947, the Regiment arrived at Pathankot and I was appointed as 'A' Troop Commander of 30 Field Battery.

I had imbibed the essential ingredients of artillery fire during the strict and harsh war time training and exposure to actual war in Burma. The sole function of an Observation Post (OP) officer was to bring timely and accurate fire on the enemy. This was possible only if the vehicles moved the guns and ammunition to the gun areas in time by day or night and the wireless and line communications between the OP and guns worked without fail.

Therefore, immediately after getting appointed as the Troop Commander, I located my Troop VCO (Viceroy's Commissioned Officer), later designated as Junior Commissioned Officer (JCO) and in a mix of Hindustani and English conveyed to him that I would inspect the vehicles, signal equipment and guns starting at 9 AM next morning. It was late afternoon when I finished with the guns and their tools. Later on arrival at Jammu, the Regiment and 'B' Troop left for Srinagar, leaving the Battery HQ and my Troop at Jammu. We received orders on 09 December to report to 1st PATIALA Battalion at Akhnur, which had been ordered to recapture Chhamb.

Capture of Chhamb - A Model for Battalion in Attack

(Refer to Sketch P). Lieutenant Colonel (later Brigadier) Bikram Dev Singh, DSO, MBE, CO, 1st PATIALA (later redesignated 15 PUNJAB), gave his orders on the evening of 9 December for the capture of Chhamb on 11 December. His plan of attack was to deploy a company after Last Light of 10 December at Chapreal, 5 kms upstream from Chhamb crossing, on the east of Manawar Tawi to guard his rear and right flank against enemy interference. Two companies were to cross the Tawi after midnight 10/11 December north of Mandiala while one company and a troop of armoured cars (7 Cavalry), under Major Sukhdeo Singh, MC, the Second-in-Command, were to 'demonstrate' a frontal attack on Chhamb from the direction of Palanwala. The CO with the defence platoon and sniper section was to move east of the Tawi in line with the advance of the two companies.



My Troop carried out night deployment of guns west of Palanwala after Last Light on 10 December;

meanwhile, I joined the Battalion Commander. After midnight I, along with my OP party, moved with the CO. After about one hour, I found that my men, carrying heavy wireless, batteries were finding it difficult to keep pace with the CO's party. As was customary in the Burma Campaign, I sought some porters to carry my wireless batteries. The CO grunted his annoyance and asked, "How many porters do you need?" I asked for two and he gave me three civilian porters who were carrying reserves of mortar and machine gun ammunition and digging tools of the battalion.

On daybreak wireless silence was broken by the two companies, to report that they were in Mandiala area. About 9 AM, we heard a few stray shots south of Mandiala followed by a report that two enemy snipers had been killed. About 10.30 AM, a couple of rifle shots, from a grassy area about 400 yards from us, went over our heads. The sniper section deployed around us, while the defence platoon probed towards the source of the firing. After a few minutes, we saw a man on a pony galloping away from us. The sniper on our right, missed him firing from a kneeling position. The CO let out an abuse at the sniper, whose second shot felled the man while the horse galloped off to disappear in the scrub and high grass.

Wireless silence having been broken, the CO assumed a tight control over the companies on the move towards Chhamb. The CO's party, including my OP party reached Mandiala; the companies, advancing from Mandiala got involved in a firefight with the enemy in Chhamb. The CO ordered Major Shamsher Singh, the right Company Commander, to cut-off the enemy behind Chhamb village. Soon the company was held-up by heavy LMG and rifle fire and I was asked to engage the enemy. On seeing the first ranging round Shamsher spoke excitedly on his wireless set in Punjabi, "Gola dushman di gichy te laga, isi jagah fire karo" (the shell has hit the nape of the enemy, fire at the same spot). It was planned to bombard the objective for five minutes "On Call" from Shamsher. On my suggestion, it was agreed that 'a smoke shell be fired from one gun to indicate the end of fire'. As the fire started and the assault company moved forward under the artillery covering fire, the CO ordered his Second-in-Command to attack the enemy in Chhamb village with vigour and a bold use of the armoured cars from Palanwala direction. Some of the shells, on hitting the tree tops, produced an airburst effect over the enemy trenches and demoralised him. Soon a "Verey Light" signal indicated the capture of the objective.

In the meantime we had moved forward, from where we could see the 7 Cavalry armoured cars in the river Munnawar Tawi area, moving astride the Palanwala - Chamb track. As the leading armoured car climbed up the narrow track, we heard a loud explosion followed by a wireless broadcast by the armoured car VCO, "Saale topkhana ne apna hi armoured car barbad kar dia". I told the CO, "It could not be an artillery shell. Our guns are firing about 1000 yards away from the armoured car and in any case the guns had not been firing at the time of the armoured car blast". The CO changed direction towards the scene of the explosion, where we discovered that an anti-tank mine on the track had blown the rear tyre of the armoured car. The pioneer platoon was summoned but a 3 tonner was also blown-up on another mine, before the pioneers arrived to clear two more mines.

Thereafter, the CO climbed the double storey burnt house of Honorary Captain Bhola Singh, a retired Gunner VCO, and gave out the deployment orders to his companies, guns and machine guns from the window of the first floor of the house. I still remember the attack on Chhamb as 'a model for a battalion in attack' under effective control of the CO.

* **Major General Lachman Singh Lehl, PVSM, VrC (Retd)** was commissioned in the Regiment of Artillery in 1943 and retired in 1978. In the 1947-48 War in J&K, he took part in the battles of Chhamb, Naushera, Jhangar, Rajauri, Uri and Zojila. He was awarded the Vir Chakra for gallantry in the battles for recapture of Jhangar. During the 1965 Indo-Pak war, he was General Staff Officer Grade I in the Military Operations Directorate. In 1971, he commanded a Mountain Division in Bangladesh and was awarded the Param Vishisht Sewa Medal for outstanding leadership in Battle. He has authored three books on 1965 and 1971 Wars with Pakistan : Missed Opportunities, Indian Sword Strikes in East Pakistan and Victory in Bangladesh.

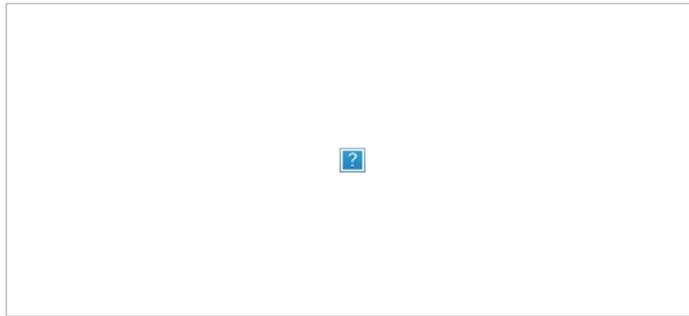
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Chhamb 1965 - The Artillery Battle

Brigadier MS Chowdhury, VSM (Retd)*

The area Chhamb - Jaurian is bounded by the Kalidhar Range in the North and River Chenab in the South. Both in 1965 and 1971, Indian Army was caught unprepared in this sector, suffered reverses and lost valuable territory. This state of unpreparedness in two successive wars appears to be inexplicable. The area consists largely of flat plains. Flank protection is provided by hills in the North and River Chenab in the South. The only obstacle is River Manawar Tawi which is fordable by tanks in dry season. The sector is in close proximity to the important Pakistani bases of Sialkot and Kharian. The Indian town of Akhnur with its vital bridge is within easy reach. In short it was the ideal area in which Pakistan could have flaunted its newly acquired Patton tanks, artillery and other military equipment under the SEATO and CENTO treaties. From India's point of view this sector posed many problems - which should have made us all the more wary. It did not! Later we learnt that one of the tasks given to Pakistani forces was to capture Akhnur Bridge earliest.

Taking advantage of the Indian debacle of 1962 and a visibly weak political leadership after Pandit Nehru, Pakistan under the leadership of Ayub Khan and advised by Zulfikar Ali Bhutto planned and launched Operation Gibraltar in the valley followed by Operation Grand Slam in the Akhnur Sector. Pakistan's infiltration operations- Operation Gibraltar- had failed. The area of Haji Pir bulge had been captured by us. It was clear that Ayub Khan must respond. This took the form of Operation Grand Slam. And as Pakistani preparations proceeded, UN observers did alert India. Our response was somewhat less than the minimum required. 191 Infantry Brigade was deployed in the Sector. 14 Field Regiment was located in Pathankot and was under XV Corps. It was placed in direct support of 191 Infantry Brigade. Later one troop (4 guns) of a medium battery was also made available.



The following narration is a record of the personal experiences of Captain MS Chowdhury [later Brigadier, VSM (Retired)] as Adjutant and observation post officer of 14 Field Regiment during the 1965 operations, in the Chhamb - Jaurian Sector. Please refer to Sketch P.

14 Field Regiment had been located in Punch from 1960 onwards. On completion of my Young Officers Course I reported to the unit in Dec 1961. Life was difficult as our picquets were on very high features approachable only along steep pathways. This was a difficult start to a career but an ideal grounding for the future.

Towards the end of 1964 excitement built up. We were due for turnover and were to be moved to Pathankot, which did come to pass in Jan 1965. However, the euphoria of a peace posting dissipated speedily as a representative from station headquarters showed a scrubby piece of ground where we were required to pitch our tents. After some haggling we were allotted two houses for captains. One was for the CO and the second one was to be used as a mess. Besides from Mar onwards we started receiving alerts putting us on four hours notice. In effect we had exchanged a field posting for a posting which had all the tensions of a field area with the added irritations of peace time soldiering. Large working parties were required on a daily basis and there was insistence on starting the much disliked family welfare centre.

In Mar 1965 our somewhat less than idyllic existence was sharply interrupted as we were rushed to and deployed in Akhnur. The area of the Rann was hotting up. Wisdom prevailed and this spat was peacefully resolved and we were back in Apr. By now I had taken over as Adjutant and my first challenge was to find a suitable reply to a letter on my table demanding an explanation for not conducting the laid down training cycles.

In the succeeding few months we were able to settle down well and get into the rhythm of training cycles. But this was too good to last. In Jul we rushed back to Akhnur to redeploy in the same gun area vacated by us earlier. This time our intelligence was bang on. Pakistan began infiltrating Gibraltar Force (9000 men) across the Cease Fire Line on 1 Aug from Kargil to Chhamb.

The tasks allotted to these infiltrating columns are well known. As far as we were concerned the infiltrators began to create confusion, disrupt communications, lay ambushes and attack isolated locations and troops. Our response was astounding. As soon as any information from any source, whether reliable or not, was received, some troops with three guns were rushed post haste to the area of reported infiltration. After a few hours of combing the area and guns firing indiscriminately, this force was pulled back. This happened over several days. Each night the CO, unmindful of the risk (the infiltrators were laying ambushes along the roads) and fatigue accompanied one selected column in order to be with the men. This was well appreciated. Our one notable success was liquidating of some individuals and the capture of one infiltrator. He would have been barely 20 years old, tall and tough with no sign of fear or fatigue on his face. He wore a green shirt and white salwar. He spoke confidently and said, "Saab ek request hai. Humko izzat ki maut dena".

Round about 8 Aug the regiment was moved forward. Regiment less one battery was deployed below Mandiala Heights and one battery near Dewa. From the new locations we continued our random firing in response to

any request made. One such request was, "fire at that grove just to rattle them". All this while not one shell was fired at us from the other side. This made us complacent and we failed to take normal commonsense precautions. Later we learnt that Pakistan was concentrating 4 Corps Artillery against us in addition to the artillery already deployed and dumping huge amounts of ammunition.

While not one Pakistani gun opened up, their observation post (OP) officers in civilian clothes infiltrated into our area, established a grid, carried out silent registration and selected several advantageous OP positions. They also established contact with selected locals.

15 Aug 1965, a Day of days ! It was pleasant, sunny and cheerful. Happily, with no premonition of the morrow, a Mandir function had been planned. Our Mandir squad was active and on a high. It was planned to utilise our piggery resources for the evening meal along with a special issue of rum. At about 0730 hours without the slightest warning a ferocious artillery assault hit 191 Infantry Brigade with 14 Field Regiment being singled out for special treatment. The enemy had concentrated four batteries of medium guns (155 mm howitzers), four batteries of field guns (105 mm guns), possibly one super heavy gun battery along with a huge amount of ammunition including a disproportionate quantity of airburst shells against three batteries of the obsolescent 25 Pounder guns with limited ammunition. Controlled by the infiltrated OP officers and an airborne observer, this artillery assault of about three hours was a demonstration of masterful technical gunnery and artillery tactics. Each position was dealt with telling accuracy - the air burst ammunition inflicting considerable additional casualties. The gun position at Mandiala was in shambles. Guns were damaged, ammunition was exploding, gun towers were on fire and bedlam reigned supreme. The gallant second in command (2IC), who is in charge of the gun position, unmindful of his own safety rushed about attempting to restore order but to no avail. I put all my efforts to succour the wounded. One of the gun position officers had been hit by a flat saucer sized splinter (possibly from a super heavy shell). The front half of his face had been neatly sliced off. Squashed human parts and splashed gore were a ghastly sight.

My own 'H' shaped command post had received a direct hit (there was no overhead cover much less an overhead protection). One technical assistant and an operator on one side of the 'H' were blown to bits. On the other side one technical assistant, one operator and I got away with minor injuries. I was temporarily blinded.

One battery was deployed near Dewa to support operations in the hill sector to the North. I went there on 14 Aug to see how additional protection could be provided to the guns and ammunition. On the nearby Dewa feature preparations were in full swing for the Brigade Commander's Orders the next day. Even under the prevailing circumstances the 'chuna-geru' routine had not been overlooked! Brigadier Masters, Commander 191 Infantry Brigade, was a fine soldier who retained his poise in the all pervasive chaos. Did the enemy get to know about the 'O' group at Dewa? On 15 Aug with uncanny timing and accuracy the 'O' group and the guns were hit. The Brigadier was killed probably by a direct hit from a medium shell. There were other casualties and the gun position was battered with several guns receiving direct hits and the ammunition blowing up.

The ensuing chaos was incredible. Positions were abandoned, command and control broken with no effort to restore order succeeding. In his book, 'September 65', Pakistani Brigadier AAK Chaudhri writes, "Fire was directed with such telling effect that this regiment (14 Field) never recovered from the punishment". It would be difficult to dispute this assertion. Yet the unit continued to function against great odds.

Intermittent shelling continued for the next two days. We vacated many localities, some of which were promptly occupied by the enemy. Additional troops were rushed in to recapture our lost localities. I was the OP officer with 2 SIKH which recaptured two lost localities. It was amazing to see the CO, Colonel Khanna, lead his men by the sheer force of his personality. He led - literally led - his unit in the recapture of Red Hill and Green Hill. Each time the battalion went to ground due to heavy fire, the brave CO was on his feet urging his men on. That is how he lost his life a few days later and was awarded the MVC. One learnt how deceptive initial impressions could be. Colonel G S Sangha (CO 3 MAHAR) and Major Bhaskar Roy (20 LANCERS) appeared to be easy, genial and jolly nice officers. Both were to go on to win the MVCs. But as it often happens in battle, there were many many acts of gallantry which went unrewarded. In the next few days, all the lost positions had been recaptured by us.

We were facing a shortage of manpower, ammunition, spares and defence stores. I was tasked to go back to Pathankot to see what could be done. My arrival at Pathankot had been well advertised. Immediately on entry into the cantonment I was mobbed by families and rear parties of several units. It appeared that gross rumours were afloat, such as, 'CO had gone over to Pakistan; the whole brigade had been wiped out; and that Pakistani forces were racing towards Pathankot, having taken Akhnur'. It appeared that the main culprits behind these rumours were the men who had left their positions and had fled to Pathankot. That day I learnt yet another important lesson pertaining to operations: "rumours are a natural corollary to the fog of war". Very active measures are required to control the corrosive effect of this menace.

The final result of this trip was positive. Not only did I return with some men of my unit, but other units as well; plus the prized booty of defence stores! Much later I was amazed to read in General Musa's book, 'My Version', that 'Indian defences in Chhamb were strongly held, with barbed wire, were heavily mined and the automatics were located in three tiered concrete pill boxes'.

The unit was reorganised and redeployed with the regiment less one battery in area Chhamb (near Mandiala) and one battery further North to support the hill sector. Soon thereafter we received the bad news that the CO (in his substantive rank) and the 2IC had been removed. A wave of dismay swept across the unit. It was clear that they had been made scapegoats since the Brigade Commander was not within easy reach (having probably occupied his place in Valhalla).

Enemy artillery continued to batter us. Our gun area had acquired such a bad reputation as the most dangerous spot on earth that very few visitors ventured upto it. Even senior officers who came to castigate our performance, did so from the safety of our wagon lines (WL). This is a secure area where the gun towing vehicles are

located to prevent them from being hit.

In view of these unhappy circumstances I had devised a unique way of briefing those who required it but were not inclined to savour the delights of an infamous gun area. A mirror map was kept in the WL and briefing was carried out on the line from gun area to WL using this map.

Towards the last few days of Aug enemy artillery action decreased to a tolerable level. After the travails of the past few weeks the euphoria was delightful. Pleasant sun shine, carefree swims in Manawar Tawi, an odd shikar and good quality rations made our existence highly cheerful. But what were our intelligence organisations doing? Chhamb was an ideal area for operations for Pakistan with the vital prize of Akhnur within easy reach. Pakistan was smarting from the failure of its infiltration operation and could not have been expected to idly let bygones be bygones.

In the early morning hours of 1 Sep we were once again subjected to a ferocious artillery assault. And yet again we were caught with our pants down. Enemy artillery fire lasted for a good three hours after which came the assault by infantry and armour. Soon enemy armour was swarming in the area. Later it broke through at Mandiala and came close to HQ 191 Infantry Brigade. Frantic calls for air support were made at about 1000 hours. The response materialised at around 1800 hours in the shape of four aircraft. These aircraft may or may not have annoyed the enemy but they hit us well and proper. Armour, guns and ammunition were attacked and damaged by them. Later all four aircraft were shot down by Pakistani aircraft within our sight. During the next two days of battle the IAF did not make an appearance.

By the evening of 1 Sep troops in the area were ordered to withdraw to Akhnur. Our unit withdrew in good order and was redeployed in the area of Akhnur.

On 4 Sep the situation was:-

- (a) 10 Infantry Division which was under raising was made responsible for this sector.
- (b) 41 Infantry Brigade had partially prepared its defences at Jaurian and was already under heavy enemy pressure.
- (c) 28 Infantry Brigade which was the Corps reserve was at Fatwal Ridge (about 10 km West of Akhnur) preparing a hasty delaying position.
- (d) Area of Kalidhar Ridge was strongly held by us.
- (e) 191 Infantry Brigade was preparing defences in the area of Akhnur.

At Akhnur we got the news that 161 Field Regiment at Jaurian had abandoned their guns and had been decimated. From where we were, we saw the men streaming back in disorder. There was strong criticism against the unit. And there was sharp unease in our unit. We were probably the next who would face the fire storm. We pondered over the issue of how to control the situation in the face of the ferocious artillery assaults we had been subject to inside semi prepared defences. We got plenty of uninformed criticism from the senior officers and very little inspirational leadership. The main reliance was on threats of sacking and court martial. This technique of leadership of "You better do it or else" is not the best thing to do, especially when troops are facing an adverse situation in battle.

6 Sep was a happy day. Our own offensives commenced and enemy artillery activity declined perceptibly! That very night we were ordered to advance and recapture the lost area upto Chhamb. This operation could not make much headway due to heavy enemy fire. Thereafter 10 Infantry Division was reorganised and plans cast afresh.

By the time cease fire was declared we had succeeded in recapturing most of the lost area. However, parts of Kalidhar were still held by the enemy. We were involved in the recapture of these areas post cease fire. Thus 14 Field Regiment which was among the first units to be involved in operations was among last ones which continued to operate even after cease fire. But we got precious little credit for it.

In summation, my own view is that we had been soundly trounced by our Pakistani counterparts. Not only they had better equipment, they used it to best effect. They executed the principle of surprise and concentration in a masterful way - we being the main victims. They showed superior technical gunnery chiefly in predicted fire and accuracy. Occupation and vacation of gun areas was expertly done. Though short of ammunition, which was imported and its resupply in jeopardy, they fired enormous quantity of ammunition to make a telling impact in the initial battles. They appeared to have an abnormally large quantity of airburst ammunition. We were lucky in that quite a few rounds had failed to explode. They showed special skill in the delivery of harassing fire to make it acutely damaging. The emphasis was on a jagged pattern of firing, irregular timing, skillful choice of targets and in firing the right quantity of ammunition. At the end of few days quite a few men in the gun positions were nervous wrecks. We had a job on our hands in preventing the spread of this infection. They used more modern means of communications to great advantage vis-à-vis our good old Radio Set 62. The survey was speedy and accurate which added to the efficacy of predicted fire. Another area where great damage was done to us was in preparatory bombardment. This fire was delivered before every assault and it relied chiefly on the heavy artillery.

Their chief forte was in counter bombardment with retaliatory fire hitting our guns speedily and with accuracy. They had the advantage of availability of gun locating radars which were supplemented by flash spotting, sound ranging, survey, silent registration and innovative and daring OP officers. Such was the effect of their counter bombardment that at a critical stage of battle 41 Infantry Brigade was denied vital fire support. Every major operation began with a heavy counter bombardment and then the fire was shifted to the objectives. Subsequently, during lull in battle and between phases, our guns were again hit repeatedly.

In all honesty it has to be admitted that Pakistani air OP and ground OP officers were a class apart. They

showed high skill in the direction and control of artillery fire. They worked in an unconventional manner which we were not able to emulate. So high was their resolve that they were willing to operate outside the protection of Geneva Convention. Many wore civil clothing and established contact with the locals. They lived in abandoned houses and called for fire from atop trees and houses. They showed special skill and spirit in operating as stay behind OPs. This is not to suggest that our OP officers showed less courage. But they did lack that feeling of elitism as well as training in tactical aspects of gunnery. Up to this point our emphasis had been largely on the technical aspects of gunnery.

Without doubt artillery was their key arm and it did outclass us by a good margin. Happily by 1971 this trend had been reversed and we battered them round for round and in most cases established fire superiority. We had learnt our lessons well!

***Brigadier MS Chowdhury, VSM (Retd)** was commissioned in the Regiment of Artillery in 1961 and retired as Sub Area Commander, Jharkhand, Orissa and Bihar in 1994. He has been Chief Instructor at the USI since 11 Sep 2000.

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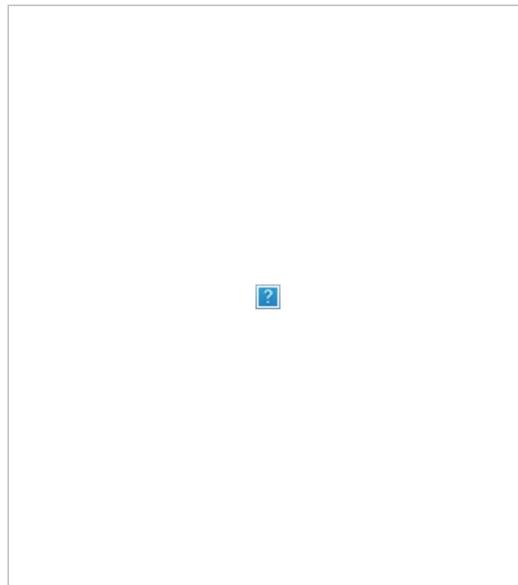
Battle of Phillaurah - 1965 and the Battle of Basantar - 1971 (Leading from the Front)

Lieutenant General Ajai Singh, PVSM, AVSM (Retd)*

Background

17 Poona Horse was part of 1 Armoured Division during the 1965 War and 16 Independent Armoured Brigade during the 1971 War. In both the wars, the Regiment was on the ORBAT of 1 Corps which launched the offensives into the Shakargarh Bulge / Sialkot Sector. Major (later Lieutenant General) Ajai Singh found himself to be in command of a Sabre Squadron ('C' Squadron) during the 1965 War and as the regimental Second-in-Command during the 1971 War. He played a crucial role during both the battles. The narrative that follows describes, (then) Major Ajai Singh's first hand experiences of the two battles. Read on....

In 1965, I was in command of 'C' Squadron of the 17 Poona Horse which formed part of 1 Armoured Brigade of 1 Armoured Division. It so happened that we were pushed into war in the Sialkot Sector with the least preparation, so much so that we moved into battle without maps! The only orientation we knew was that Pakistan was to the South and we were to attack North to South to sever the Shakargarh Bulge. To any professional, this type of operational briefing coming from the Commandant (CO) would seem ludicrous. But my Commandant, Late Lieutenant Colonel AB Tarapore PVC, could not be blamed as that is all what his higher HQ had briefed him about. The two Divisional Objectives were to be the towns of Phillaurah and Chawinda in that order of priority. Please refer to Map 1. It is with these very brief orders and without maps that we went into the offensive. The result was as expected; the entire Division got disorganised right from the start.



Map 1

Courtesy : This map has been copied from 'The Story of the Poona Horse' Lieutenant General Hanut Singh, PVSM, MVC (Retd), Agrim Publishers: Dehradun, 1993, First Edition, Page 201

It is in this total confusion that I went and captured the town of Phillaurah with my "Single Tank" with my Squadron following behind me. Unbelievable! but this is how it happened. As the fire fight was going on between the tanks of the two leading Regiments of 1 Armoured Brigade, our Regiment was given the orders to outflank the contact line. Whether other squadron commanders heard these orders or not I cannot say, but in my eagerness to react with speed, I moved for the outflanking move asking my Squadron to follow. In that otherwise plain area I saw a high ground, an ideal location for a tank position. I rushed for that and to my total astonishment what do I find, I was in the town of Phillaurah! Seeing my tank the enemy troops deployed there were totally surprised and in panic they surrendered.

When I reported the capture of the divisional objective Phillaurah to my higher HQ they could not believe it, till I sent the Phillaurah Police Station board as evidence. The General Officer Commanding (GOC) and the Brigade Commander were overjoyed and wanted to recommend me for an immediate gallantry award, which I vehemently declined, as I felt that I had just performed my duty and no more. Incidentally, the Police Station Board of 'Thanah Phulor' is still with us and is displayed as a War Trophy in our Quarter Guard. The next incident was my capture of Butur Dograndi (approximately 5 kms South West of Phillaurah), where my CO Lieutenant Colonel Tarapore was martyred and was decorated with PVC (posthumous). The next paragraph relates to that.

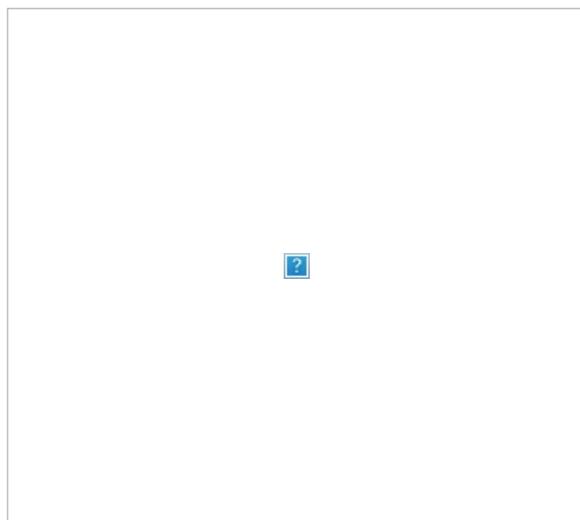
It all happened in the following sequence. After the capture of Phillaurah the next divisional objective was the important communication centre of Chawinda. The plan was that the Lorried Brigade was to attack the town supported by a squadron of armour. My Squadron was nominated to support the attack. Despite our best efforts, we failed to capture Chawinda and the mission was abandoned. Thereafter, a new plan was formulated. It was to encircle the town by capturing Butur Dograndi (which was behind Chawinda) and then attack the town. For this task, my Squadron was again chosen and grouped with 8 GARHWAL RIFLES. This Combat Group carried out the attack with great elan and ferocity and despite a lot of casualties on both sides Butur Dograndi was captured. To assess the situation personally, when my CO Lieutenant Colonel Tarapore joined my Squadron, his tank was hit and he alongwith his Intelligence Officer (IO) Captain Jasbir Singh were killed. The sad part is that the Division did not exploit this brilliant manoeuvre (which had compelled the enemy to evacuate Chawinda defences) and as a consequence we had to abandon the

captured objective of Butur Dograndi. However, alongwith Phillaurah, Butur Dograndi was also allotted as a Battle Honour to the Regiment. Let us now move on to the 1971 War.

The 1971 War for me had a new perspective as by now I was the Second-in-Command under a well-known and reputed soldier like Lieutenant Colonel (later Lieutenant General) Hanut Singh, MVC. Being very good friends, he leaned on me heavily to share my combat experience. If I recall correctly I shared with him two thoughts; first, the only infallible truth about war is that it was - total confusion and the one who draws out order from the same was a winner; and the second, that he should hold his 'Command Together' till he gets a suitable opportunity to employ it. The most significant action during this War was the now famous Battle of Basantar River where the Regiment broke the counter attack of a Pak Independent Armoured Brigade destroying as many as 57 of their Patton Tanks. A brief description of this battle as I saw it would be in order. Please refer to Map 2.

It was on the Night of 15/16 Dec 1971 that the stage was set for the ensuing battle. The Indian Army plan was to attack across the Basantar River (which was heavily mined) and threaten the depth defences of Pakistan; namely Zaffarwal and Sialkot. For this an infantry division was to make a bridgehead, engineers were to clear a minefield lane and The Poona Horse was to induct and enlarge the bridgehead. The attack was to go in after last light on 15 Dec. For this operation the regimental deployment was - the CO Lieutenant Colonel Hanut Singh was at the Divisional HQ to monitor the battle closely and the regiment was deployed in the rear under my command to move in for induction when ordered. By about midnight the attack had achieved complete success and the bridgehead had been established. The CO ordered me to move the Regiment for induction which I did. When I approached the entry point of the minefield lane I was stopped by an Engineer officer there who informed me that the enemy had counter attacked the bridgehead, our infantry was reeling back and the clearing of the minefield had been abandoned. I immediately passed this message to the CO who was still at the divisional HQ. His reaction was spontaneous and he made the following transmission which has become historically famous :-

"Hanut for Ajai, never mind what the Engineer officer is saying, you must cross the Basantar River and assist the Infantry to consolidate the bridgehead, otherwise history and posterity will not forgive The Poona Horse".



Map 2

Courtesy : This map has been copied from 'The Story of the Poona Horse' Lieutenant General Hanut Singh, PVSM, MVC (Retd), Agrim Publishers: Dehradun, 1993, First Edition, Page 260

The above message launched the famous Battle of Basantar. Disregarding the Engineer officer's warning, I entered the uncleared minefield ordering the Regiment to follow my tank tracks, to level their guns and keep firing at random just to convey to the enemy that our tanks had arrived to save the bridgehead. The tactics worked. First, the withdrawing infantry took courage to return back; and secondly, our random fire hit a few enemy tanks and created panic in their ranks. A major battle had already commenced.

Here is a short description of the Battle. As luck favoured us, the entire Regiment crossed the Basantar River behind the tracks of my leading tank. It was a pitch dark night but as I got across the river, I realised that I had hit a village called Saraj Chak where in the light of burning enemy tanks, I could see the enemy infantry holding the village, running helter skelter in panic. Just then my CO came on the radio to ask me for the situation report. On receiving my report he profusely congratulated me and gave out his plan as under :-

"I am right behind you with the following squadron, I will take over Saraj Chak, meantime you swing right and occupy Ghazipur Reserve Forest as the the Right Pivot and I will send the third squadron to occupy the Left Pivot at the villages of Jarpal and Barapind; with this deployment we will facilitate our infantry battalions to consolidate the bridgehead".

This was then the setting for the fierce battle that ensued next morning at the crack of dawn. I will now briefly describe the Battle at Ghazipur Reserve Forest and fill in the details of other sectors which I got to know later.

My Squadron had entered the Reserve Forest just before first light, while it was still dark. When the first light came we were shocked to see Pak soldiers running around in total panic. Luckily, I had a company of 18 Rajputana Rifles (Mechanised) as a part of our Combat Group. I ordered them to round up all Pak soldiers and take them as

prisoners. When this action was in progress, an artillery smoke screen started being made in front of my tanks. Military sense cautioned me that an enemy tank counter attack was to follow, which did materialise. Soon, against early morning horizon a mass of Pattons in assault formation came rushing towards my squadron. I asked my crews not to panic and open fire only on my orders, which they obeyed. Just when the Pattons were within range I gave orders to open fire. My well trained gunners in the first wave of attack shot seven tanks. Thereafter, there was total massacre of the Pak assaulting force and within half an hour the attack petered off. I reported this to Lieutenant Colonel Hanut and he was totally thrilled. Before he could get over his elation an attack developed on Barapind and Jarpal. Here also the Poona Horsemen stood their ground valiantly. It was here that our youngest brave officer Second Lieutenant Arun Kheterpal sacrificed his young life for the honour of the Regiment and was awarded PVC (posthumous) for his gallant action beyond the call of duty. At the end of the day when ceasefire was declared the battlefield was strewn with the wreckage of 57 enemy Patton Tanks.

I can mention here - two basic lessons that emerged. First, 'leading from the front is irreplaceable' and secondly, 'leadership is infectious'. Of course, above all 'courage' is the most important factor in battle.

* **Lieutenant General Ajai Singh, PVSM, AVSM (Retd)** was commissioned into the 17 Poona Horse in Jun 1956 and retired from service on 30 Nov 1993 as Director General Combat Vehicles. He participated in both the wars of 1965 and 1971 with Pakistan in the Western Sector. Post retirement, he was Governor of Assam from

05 Jun 2003 to 04 Jul 2008.

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Centenary Commemoration of the Great War (1914-18)

Squadron Leader RTS Chhina (Retd)*

The First World War (1914-1918) or the Great War for Civilisation, as it was known at the time, was a watershed event in modern world history. The events of that conflict changed the social and political map of the world forever. Its repercussions reverberate through time and many contemporary conflicts, particularly in the Middle East, trace their roots directly to the fall out of that war.

India, though a colony at the time, actively supported the war effort in its bid to gain Dominion status. The overwhelming majority was united in the opinion that if India desired greater responsibility and political autonomy, it must be willing to share in the burden of Imperial defence.

As a result, India contributed immensely to the war effort in terms of both men and material. Her soldiers served with credit and honour in numerous battlefields around the globe: in France and Belgium, in Aden, Arabia, East Africa, Gallipoli (Turkey), Egypt, Mesopotamia, Palestine, Persia, Salonica, Russia, and even in China. By the end of the war 1,100,000 (1.10 million) Indians had served overseas at the cost of 60,000 dead. They earned over 9,200 decorations for gallantry including 11 Victoria Crosses. These figures include the contribution of over 26,000 Imperial Service troops who were a part of the Indian State Forces.

To mark the occasion and highlight the pivotal role of India in the conflict, the USI Centre for Armed Forces Historical Research (CAFHR) in cooperation with the MEA Policy, Planning and Research Division, has drawn up a plan to use the Centenary commemoration of the Great War as a medium to project India's soft power globally, by emphasising on the sterling contribution made by the Indian Army towards the establishment of world peace. Functioning under the guidance of a Joint Steering Committee, a programme of planned activities has been agreed upon. These activities are listed in broad outline below for general information:-

- Produce a series of illustrated booklets on the role of the Indian Army in each major theatre; and one giving an overview of India and WW1.
- Produce detailed academic studies on each of the major theatres, and on derivatives thereof.
- Selected scholars/experts will be encouraged to take part in international conferences that will be organised in various countries, to highlight India's pivotal role in the conflict.
- An international conference on the theme "India and the Great War" to be organised by the USI in 2014/2015.
- A panel of writers/scholars on the same theme to be organised to participate in the Jaipur Literature Festival 2014.
- Prepare one or more coffee table books giving an illustrated overview of India and the Great War. (Volumes to depend on availability of suitable photographic images).
- Sponsor battlefield tours of the Indian battlefields in Gallipoli and in France & Flanders, in collaboration with local partners. Produce a "Battlefield Guide" on each, preferably as a collaborative effort with Australia and Belgium/France. Official involvement with sponsorship/publicity to continue through from 2014 till 2018. Thereafter local partners will be encouraged to carry forward with the themed tours on their own steam.
- Sponsor exhibitions on the theme of "India and the Great War". Exhibitions can be generic and/or theatre specific. Exhibitions to be prepared by the USI CAFHR in collaboration with local museums/partners overseas.
- Produce a documentary film on the theme "India and the Great War - An Overview".
- Specific activities that could be undertaken in collaboration with various Governments/Institutions to be identified for further action.
- To coordinate participation by Indian military contingents in ceremonies being organised overseas.

Members who have photographs, documents or other memorabilia of family members who served in the First World War and who wish to share these for inclusion in the project may kindly contact the Secretary CAFHR at cafhr@usiofindia.org

Editor's Note

In the above context, a short piece by Lieutenant General Baljit Singh, AVSM, VSM (Retd) recapitulating his experience during his visit to the United Kingdom in 1959 is being carried in the following pages under the title 'India And The Great War'.

* **Squadron Leader RTS Chhina (Retd)** is Secretary and Editor CAFHR.

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India and The Great War

Lieutenant General Baljit Singh, AVSM, VSM (Retd)

If the introductory Brochure is a sample, of the myriad illustrated booklets intended to be published, I can scarcely wait to have one complete set! I would equally give anything to know a bit about the gentleman who conceived and executed the "OUTWHISKERED" caricature.

I am sure that each of the sketches/images in the brochure brings a flood of memories/anecdotes to the viewer. Among the Coffee Table Books planned, there is a pencil portrait of Sikh soldiers (four kneeling and two standing behind) which is signed not just by the artist but sort of also authenticated by none else than the Commanding Officer (CO). Now that CO is JOHNNY HILL which matches with the signature and was indeed in command of the 15 Ludhiana Sikhs, throughout the War. Obviously, it must have been executed during the two weeks that they were pulled back for rest and recuperation as is evident from their smart turbans, beards etc. A fortnight later Lieutenant John Smyth would lead ten volunteers from his Battalion on a death-riddled mission from which he alone survived. Smyth won the VC, the other ten IDSM posthumous and the following valediction:

"There are no finer fighting men in our Indian Army than the Sikhs, the descendents of those fierce long-haired warriors who fought so stubbornly against us at Firozshah and Chillianwalla,.....And there are no finer officers than the men who lead them, for no youngster stands a chance of being gazetted to a Sikh regiment who has not shown that he possesses in a marked degree all the qualities which are likely to ensure the confidence and devotion of those whom he hopes to command....."

Now some 34 years later, I had a strange but an unforgettable encounter with, by then Brigadier Sir John Smyth, VC, MC1 and the Brass Bands of Rattray's and 15 Sikh at the huge fore-compound inside the Edinburgh Castle, in September 1959. I had completed three years Service and was eligible for two months furlough with two months annual leave. When I explained to my CO that I intended to hitch-hike through most of Europe and the UK, he readily sanctioned leave-cum-furlough. My father happily paid sea passage to and fro; 1st Class outwards in P&O Carthage and Tourist on the return on P&O's Iberia. Leave and furlough totalled up to Rs 450 into 3 = Rs 1350 which at Rs 16 to a Pound was a mere £ 85, further reduced to £ 75 because of conversion of currency through a travel agent. Most of it I had to hide in my socks etc because the Reserve Bank of India allowed £ 10 only! My Troop JCO had relatives in South Hall and they would give me another 50 £ once I got there. I sat with Thomas Cooks in Bombay and bought train tickets for my Europe jaunt, always on night trains, to take care of night-lodgings. Where the stay was overnight, I checked into Youth Hostels.

When in Edinburgh, I saw a poster of a Torch-Light Military Tattoo, followed by a Military Band Display by an Indian Army Band contingent. I dug into my reserves and bought a seat in the front row. The audience simply went wild with the music and the swagger of the Rattray's Sikh Brass Band. At the end of it, a JCO in full dress uniform smartly marched up to a gentleman in a tweed jacket, medals above breast-pocket and a smart Red turban! Once the be-turbaned Englishman walked up to the Band, they lifted their CO Sahib Bahadur on their shoulders to a thunderous applause of a mammoth audience. At some stage, Brigadier Smyth's gaze turned upon me, also in a striking Maroon turban and after a nod from him, the JCO now walked up to me and ushered me amongst them. And once my army credentials became known, I too was joyously feted! That experience was and remains a great memory from my travels. But it was not till 1973-4 that out on an exercise around Suratgarh-Bikaner (I was BM, 43 Mechanised Brigade) that along with my Commander we landed for a meal with a BSF Battalion. As the BSF Commandant was an ex-CO of Rattray's, the Mess staff and the Band were turned out in Rattray's kit. The Band played all through the meal and someone then showed us a Long Playing (LP) Gramophone Record, inside a 12 by 12 inch laminated slip-in cover having the Rattray's Brass Band in colour, commemorative of their Band performance at Edinburgh!

The memory flashback goes on and to a most unusual but true anecdote. When 15 Sikh were manning the trenches on the Western Front, they received a message that an Indian Maharaja (of Tikari) was visiting them for the night. And shortly before Roll- Call, "He rolled up in a smart uniform and beautifully polished boots with an orderly carrying his kit. He was given a dug-out and retired to sleep. Early next morning, clad in a pair of blue silk pyjamas, he came and asked if he could have a place to snipe from. I (Sic. Smyth, Adjutant) gave him a little cul-de-sac where he would be in no one's way, told him to be careful as the German trench was only forty yards.....I heard some dull clangs followed by roars of rage from the German trench. I peeped over the top and saw that six of their steel loop-holes had been knocked out.....I suddenly thought of the Maharaja and went looking for him. There he was in his lovely pyjamas with a 500 Express Elephant Rifle, chortling with joy and methodically knocking out every Boche loophole within range....."

As expected, the Germans responded with all the MMG and Mortars and guns at their disposal but happily there were no casualties. I had read this book in the 1960s but could not discover who the Maharaja was. Now in the 1990s, one of our frequent visitors was from the Kapurthala family and she traced out the hero of the story, from that most lethal battlefield, as SHYAM SARAN SINGH of TIKARI. But where is TIKARI? Again by chance, I had acquired the latest Oxford School Atlas in 2003 and lo and behold, TIKARI showed up (in Bihar), at last. But why had the man sought out 15 Ludhiana Sikhs on the Western Front, exclusively? Well, suffice to say that the trail led me to the creation of the "Tikari Jagir" by Nawab Mir Kasim Ali Khan of Bengal (Battle of Buxar 1763) and given to this Gentleman's ancestor for loyal services rendered on the battlefield against the East India Company's Army! As for the TIKARI family's propensity for shikar, again a chance gift by Squadron Leader RTS Chhina of the book "SAGA OF AN INDIAN I.M.S. OFFICER", by Major General DK Palit, Vrc (Retd)² revealed that secret, as well.

Do 15 Sikh and Rattray's Sikhs know and reminiscence about these harmless, timeless and intrinsic legends? I doubt. That is the tragedy of our times, of "fast-forward".

Endnotes

1. For details of his life and times, refer page 553 to 561 of USI Journal, Vol CXL, October December, 2010.

2. Saga of An Indian I.M.S. Officer : The Life and Times of Lieutenant Colonel Ananth, Palit OBE (1883-1972) by Major General DK Palit, VrC (Retd), published by Centre for Armed Forces Historical Research, United Service Institution of India, 2006, refer page 154.

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