CENTRE FOR ADVANCED STRATEGIC STUDIES

The Centre for Advanced Strategic Studies (CASS), Pune was registered on 21st September, 1992 under the Society's Registration Act, 1860, and as a Charitable Public Trust on 28th October, 1992, under the Bombay Charitable Public Trust Act of 1950. The Department of Scientific and Industrial Research, Ministry of Science and Technology, Government of India has accorded recognition to the Centre as a Scientific and Industrial Research Institution. The Centre has also been granted exemption U/S 80G of the Income Tax Act, 1961, which gives fifty percent exemption to the donors.

The Centre aims at undertaking research and analysis of subjects relating to national and international security and development through seminars, discussions, publications at periodical intervals and close interaction with the faculty members and research students in allied disciplines in the Universities and Educational Institutions as well as the Armed Forces. In the coming future, the Centre expects to award research fellowships for studies in various areas of National Security and National Development. It aims to generate and promote interest among the academicians and public in related subjects, with a view to increase awareness to national security concerns. It has received very valuable support from the University of Pune in all its activities, especially from the Department of Defence and Strategic Studies. It has a Memorandum of Understanding (MOU) with Yashwantrao Chavan Avademy of Development Administration (YASHADA), Pune for enabling mutual collaboration in the academic activities. The Centre has held a number of seminars, panel and group discussions in the past. The Centre has also embarked on publishing a Quarterly Journal with effect from January 2014.

ADDRESS:
Centre for Advanced Strategic Studies
M.M.D.W. Potdar Complex,
Savitribai Phule Pune University Campus,
Pune – 411 007
Telefax No.: 020-25697516
Email: casspune@yahoo.com / director@cfass.org.in
Website: www.cfass.org.in

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Air Marshal BN Gokhale (Retd)
PVSM, AVSM, VM
Director, CASS

Centre for Advanced Strategic Studies
Savitribai Phule Pune University Campus
Ganeshkhind Road
Pune 411 007, INDIA

Editor's Note

"Either write something worth reading or
do something worth writing"
– Benjamin Franklin

The Quarter ending September 2015 has witnessed some of the trying issues for the Government. Monsoon has been the weakest since 2009 leading to a number of farmers' suicides. With over 40% of India's water draining into the sea; it is time to rethink on the schemes like river water sharing. Recently Andhra Pradesh has shown the way by linking Godavari and Krishna rivers. Similarly let us hope that projects like Kalpasar in the Gulf of Khambhat do get completed in time. With a vast coastline it is difficult to understand as to why technological innovations for economically affordable desalination plants have not taken off. Climate change is undoubtedly a given and needs to be strengthened by measures like conservation, recycle and reuse.

Luckily with the steep fall in oil prices worldwide, the economy is holding up bolstered by conservative economic policies. With the Chinese economy showing signs of stretch and strain, India has a window to seek an opportunity to woo foreign investors. To attract their investment let us hope that the long pending bureaucratic and infrastructure issues will be addressed by the current Government with sincerity. If we do so

urgently the future is certainly bright for the economy as also for the much needed employment generation. After all by 2020 India will be the youngest nation in the world with a median age at 29. This will mean a great demographic advantage with availability of a large work force of almost 500 million. However, educating and skilling them as well as creating adequate jobs will be the greatest challenge for the country in the coming years.

We have had some technical problem in bringing out the July issue of CASS Quarterly Journal. But we are over the hump and hence both July as well as October issues are being published almost back to back. My apologies for the delay and I must thank both, the authors who contributed the articles for July issue and also the readers for their patience.

The October issue of CASS quarterly journal carries a bouquet of articles on varied subjects including much talked about issue of appointing a Chief of Defence Staff (CDS) by the former Air Chief. We have an article on the First Bajirao Peshwa whose 315th Birth Anniversary was celebrated on 18th of August. He is one of the Indian generals who remained undefeated in his 41 major battles. Innovative tactics and doctrinal use of speed to catch the enemy by surprise enabled him to expand northward the Maratha kingdom, established by Chatrapati Shivaji Maharaj.

The issue also carries articles about revisiting the Tiananmen Square incident of 1989 since its anniversary fell on 4th June this year. There are reverberations felt of this incident even today and in particular with recent turbulence in the Chinese economy. There is also an article on India's need for collaboration with Bangladesh for lasting peace in North East. In another article, the author analyses India's quest for permanent membership of UN Security Council. Another article in this issue covers the important aspect of Counter Terrorism Strategies and Lessons for India. With Nuclear saber rattling in our neighbourhood, an article reflects on Living with Nuclear Weapons, a stark and unpleasant reality. Climate change is now affecting weather patterns the world over and India in particular has been witnessing off-late crises of excessive flooding on one hand and prolonged drought on the other. An article dealing with this important aspect is also being carried in this issue. In the digitized battlefield today, shortening the OODA Loop under

Net Centric Warfare conditions is essential for timely action. This aspect is being covered in one of the articles. Lastly the issue carries a Book Review on a book written by Commander Dilip Donde. He has the unique distinction of being the first Indian to circumnavigate the globe in a sail boat single handedly in May 2010. It was a proud moment for him as also for the Indian Navy and the Nation.

CASS continues to be fortunate in receiving encouraging response from expert writers as well as the readership despite hiccups like the delay in July issue. I am grateful to them. I thank you once again for the generous support and encouragement being provided to us in bringing out the 12th CASS Quarterly Journal marking 3 years since we began this venture in January 2012.

My warm greetings on the festive season and wishing you all Happy Reading,

Jai Hind

(Bhushan Gokhale)
Air Marshal (Retd)
Director, CASS

Date: 4th October 2015

The Elusive CDS

Air Chief Marshal PV Naik (Retd.)

1.   There seems to be a renewed vigour in the discussion circles not only in & around Delhi but the cognoscenti all over the country. For the uninitiated & the unwashed the uproar is about OROP a very touchy subject for many. I would like to submit that there are a few who are thinking beyond OROP & suchlike on 'Enterprises of great pith & moment'. One such issue being addressed is important yet not in the public eye. The issue of the 'Elusive' CDS (Chief of Defence Staff).

2.   During my tenure as CAS I had a lot of occasions to address the topic of CDS because there seemed to be a misconception doing the rounds of power corridors that the IAF was the only Service opposed to the idea of a CDS. This was wrong& I used every opportunity to put forward the IAF point of view. I thought I had, by & large, succeeded. Recently I came across a 2013 article by a senior offr (with a very Godly name) which showed a total lack of understanding of what I had said. I thought it was more than likely that there were more minds which needed a better explanation & this situation needed to be rectified.

3.   The fundamental questions arising out of the issue of CDS, in my opinion, are three : -

3.1. Do we need a CDS?

3.2. What model of CDS do we need?

3.3. Is the present compromise formula acceptable?

4. I am sure everyone knows the history behind the idea of CDS. However, it would be worthwhile recalling relevant facts. According to Gen Sinha (the erudite Vice Chief, Governor &more),at Gallipoli during WW I, Gen Sir Ian Hamilton, commanding the Royal Army was desperate for Naval gunfire support. He did not get it because the Admiral of the Fleet had ordered his warships to clean the boilers. After the First World War, the British introduced a Chiefs of Staff Committee (COSC), comprising the three Service Chiefs in their Defence High Command. This arrangement was also adopted by othercountries. During the Second World War, the concept of a Supreme Commander in all theatres of war was evolved. Within a few years after that War, the appointment of Chief of Defence Staff (CDS) was made at the national level in all countries, except India. Preying on Nehru's suspicions of Indian Armed Forces, the civilian bureaucracy by an innocuous government note on May 27, 1952 declared the Armed Forces Headquarters as "attached offices" of the Defence Ministry. In one stroke the bureaucracy divested the Armed Forces Headquarters of policy-making roles as the Government manual of office procedures decreed that while Ministry of Defence could make policy, their "attached offices" merely implemented it. In essence the decision-making process was to have the benefit of independent inputs from the Chiefs of Staff Committee (COSC), the Defence Minister's Committee (Service Chiefs were members of this Committee) and the Defence Committee of the Cabinet. These in turn signified representation of the Services, mechanism for the bureaucratic processing, and of course political control. The Service Chiefs interacted directly with the Cabinet through the Defence Cabinet Committee.

4.1. Through the Seventies, Eighties and the Nineties, the bureaucracy continued to acquire disproportionate powers vis-à-vis the Service

Chiefs. The bureaucracy conveniently points to the "Government of India Transaction of Business Rules". Framed in 1961 under the constitutional powers of the President of India these documents continue to guide the conduct of business by the Government of India. It is instructive to read the document. Under these rules, the three service headquarters were designated as "Attached Offices of the Department of Defence", and are therefore placed in a position subordinate to the DoD. The Service Chiefs, as professional heads of the three armed forces and with an experience garnered over a period of at least four decades, found no mention in these rules. The Secretary Department of Defence on the other hand, according to these rules, is responsible for Defence of India and every part thereof including preparation for defence and all such acts as may be conducive in times of war to its prosecution and after its termination to effective Demobilisation. The Armed Forces of the Union, namely, Army, Navy and Air Force, Integrated Headquarters of the Ministry of Defence comprising Army Headquarters, Naval Headquarters, Air Headquarters and Defence Staff Headquarters.

4.2. Sixty-eight years after Independence, it is no secret that the political-military interface is all but absent in India's institutional set up. The armed forces are completely under the day-to-day as well as policy control of the MoD. The desirable politico-military interface is now reduced to weekly, sometimes fortnightly meetings chaired by the Defence Minister. These meetings are informal, without any agendas or note taking and have no official status although in theory, the Defence Minister is deemed to have given policy directions in these meetings! Following Kargil in 1999 the work of the Kargil Review Committee (KRC) is well known. Their recommendations followed formation of a Gp of Ministers (GoM) who came out with some futuristic recommendations. Some major ones are : -

• Creation of the post of chief of Defence Staff (CDS), whose task was to include inter-services prioritization of defence plans and improvement in synergy among the three services Creation of Headquarters Integrated Defence Staff (IDS) Formation of a tri-service Andaman and Nicobar Command and a Strategic Command. Establishment of tri-service Defence Intelligence

Agency (DIA) Creation of The National Technical Research Organization (NTRO) for gathering electronic and other technical intelligence. More than a decade after these recommendations, many of the decisions with the exception of the most crucial one— that of the appointment of a CDS— have been implemented. The CDS envisaged as a single-point military adviser continues to remain elusive mainly because there is no political or military consensus and the bureaucracy is happy to play along.

5. Do we need a CDS? Well, what are our reference points? USA, UK, France, Australia, Israel, all have a CDS, though under different names. China & Russia also enjoy a similar dispensation but their political systems are totally different from ours. Even the Democracies have adopted different models of CDS. USA with global commitments has independent theatre commands, such as the Pacific Command, Central Command, etc. Each of these are equipped with land, air and sea units, bureaucrats and political departments needed for independent campaigns. The theatre commander, a four-star general or admiral, reports directly to the US president, through the secretary for defense. In Washington, there is a centralized Joint Chiefs of Staff Committee (JCSC), headed by a five-star chairman. The army, navy, air force and marine corps chiefs plan, train and develop human resources, leaving the theatre commanders free to handle operations independently. The smaller British, French, Canadian and Australian militaries place their army, navy, air force and marine units directly under their respective four-star service chiefs. These service chiefs answer to a five-star Chief of Defence Staff, who could be from any service. The CDS reports to the minister in charge of defence.

5.1. Our requirement for India must be seen through the lens of our strategic perspective, our threat evaluation, the future environment over our region & future battle scenarios which include an assessment of our capability build up . In the foreseeable future our main concerns will continue to be China & Pak & the two front scenario. We are unlikely to develop large scale autonomous expeditionary capabilities. Our chief requirements would continue

to be deterrence against aggression & safeguarding our territory. Non State actors will continue in J & K sector. Although chances of war are remote future wars will be hi-tech, short, with high energy, day/night, with high transparency of battlefield & heavy rate of consumption of resources. It will involve rapidly shifting scenarios & use of Remotely Piloted Aircraft will proliferate. I do not envisage Ops away from mainland. Some Out of Area contingencies, however, cannot be ruled out.

5.2. Successful handling of above scenarios requires quick decisions; a high level of synergy between the Govt & military leadership; a thorough understanding of hi-tech and availability of resources to match the pace of battle. All these & many other factors lead me to the conclusion that a CDS in the future will become inevitable. Now it is not like waving a magic wand. You wave & say 'CDS' & hey presto there he is. We have to prepare the ground for progressing onto a viable CDS regime. So what do we need to do?

5.3. Integration of the three Services with MOD is the starting point. This is mandatory. If this does not happen we cannot move forward. Govts over the last six decades have ignored this issue. What this has done is that ours is the only country in the world where the Security apparatus functions without military participation in decision making. What is worse is that the benefit of years of Operational experience & advice is denied to the Govt. MOD has paid lip service to integration. Nothing has happened on the ground. The bureaucracy is quite happy because they have the ear of the Ministers and any failures or delays can , conveniently, be attributed to the 'attached offices'. Integration cannot happen overnight. I had suggested to the then RM time & again to start small, let us say at Director level. Let some civil Directors work in Service HQ &some Colonel/ equivalent Service offrs work in MOD. We need to start small & when confidence builds, up the ante. The next major setback is the total absence of any document concerning National Strategy. Spelling out where we are & where we want to be in 20 years from now. We not only need to define our National Strategy but publish a white paper so the other countries are also aware of our thinking.

5.4. Within the Services, we must set our egos aside and genuinely embrace jointness. We should concentrate on jointness in Intel gathering; Training; Perspective Planning; and, finally acquisitions, to exploit advantages accruing through economies of scale. We need to train for jointness. We need to create joint billets right from the rank of Major or equivalent. We need to modify our promotion policy to ensure that performance in joint billets has a major effect on promotion.

5.5. A look at most countries shows that the CDS has had to be thrust upon the militaries. For example the Goldwater- Nichols act of 1986 of USA which made the most sweeping changes to US Department of Defense required it to be made a law before the military accepted it. Therefore we need to have a parliamentary debate, not only to educate but to iron out differences, if any. Now in a democracy all these things take time. Therefore the post of CDS would be realistically tenable only 8-10 years from now.

6.   What model of CDS do we need is the second fundamental question to be addressed. In USA the chain of command runs from the President, through the Secretary of Defence to the Theatre or Combat Cdr. The Service Chiefs support the Combat Cdr by providing facilities like Spl Ops, Transport support, Strategic forces; etc. The Combat Cdr now has a force using all assets required to employ the Air/ Land doctrine. The CDS or, in this case the Chairman, Jt Chiefs of Staffs, is the Principal military advisor to the President, the National Security Council & the Secretary of Defence. He heads the Jt Chiefs of Staff Committee of which the three Service chiefs are members along with the Marines component.

6.1. USA has global interests. For Ops far from homeland the policy of having Theatre commands works efficiently. What this also implies is that each. Theatre has to be by & large self sufficient. This is costly & only a couple of countries could afford it. Similarly other models of CDS exist. We have to choose a model based on our strategic environment & not blindly adopt foreign models.

We must see what improvements our model can provide over the present system. The guiding principle is that policy, resource allocation & setting of priorities must be the exclusive domain of the Central Staff. Individual Services will manage their own Service within the framework centrally set. Something akin to centralised planning & decentralised execution with a policy oriented CDS or central staff & management oriented Service staffs. This involves striking a delicate balance between the central planning staff & the management tasked Service staffs. Ultimately, however, decisions on the central issues of policy and resources must be taken by the Central Staffs. Where the advice of individual Services is rejected, it must be for reasons that are openly stated. There is, therefore, a need to put these proposals to wider debates and discussions so that those who have to ultimately make them successful are indeed convinced of the benefits that are likely to accrue.

6.2. There is an unstated agenda in Army minds that being the senior Service they must get first shot at CDS. There is discussion on whether it should be a four or five star rank. Whether he should be deep selected or an outgoing Chief and what should be his tenure. In my opinion, the appointment of CDS should be by rotation among the three Services. I think the selection should be on merit from the serving Chiefs after finishing a minimum two year tenure. We need to appoint not only the CDS but his Deputy also who could be a Four Star offr. This will reduce seniority problems &provide a cushion or overlap during changeover. I think their tenure must be three to five years to be effective. As far as rank is concerned, it must be a five star appointment. We keep quibbling about four or four plus stars for what reason, I do not know. If he has to have control over the Chiefs, he must be five star. There is a misplaced fear of a Coup if so much power is vested in one person. History tells us that while there have been many Coups by Army Chiefs in different countries there is no case of a CDS effecting a Coup.

6.3. Now that we have got the mundane details out of the way let us come to the crux. The appointment of CDS should have the following characteristics:

- Five star General/equivalent at par with Cab Sec.
- Senior most single point advisor to the PM & the Govt through the RM on matters military with the Def Sec handling Defence Production, DRDO,HAL, OFB and inter ministry issues.
- CDS should be a member of the CCS & not an invitee.
- He should look after Jt Comds like the Strategic & ANC as well as future Jt Comds like Cyber &Spl Forces Comds
- He should provide the strategic vision & be responsible for strategic,perspective & contingency plans.
- He should be in charge of Tri Service Acquisitions so that we gain by utilising economies of scale & avoid infructuous duplication.
- The CDS must be viewed as the 'Head' of our Armed Forces providing strategic planning & the vision, while, at the same time each Chief continues to head his Service as before.

7. Coming on to the last fundamental question whether the present compromise formula of having a permanent head of COSC in lieu of CDS is acceptable. It may be a way out of the muddle but is definitely not a solution. On ground nothing has changed. There is no integration with MOD. The Chiefs are not likely to give the poor fellow the time of the day. The Bureaucracy would be laughing all the way at successfully having added another appendage in the process without affecting their sphere of influence. The main function of 'a single point of military advice' would not be achieved. I feel this would just be an exercise in lip service. It is better to reject it outright than muddle through for the next ten years.

8. The Kargil Review Committee (KRC) says ,"there is both comfort & danger in clinging to any long established status quo ". It goes on to say,"While this is true we must be careful not to effect change for the sake of change" lest we throw the baby out with the bathwater as the cliché goes. The idea of CDS needs acceptance by not only the Govt but other political parties also. More than that the MOD bureaucracy must be made ready to hand over a large & lucrative part of their power to the Services. Integration with MOD & the subsequent transparency& accountability has to be acceptable. The Services, within themselves have to get rid of their individual egos

& think Jointness. In my opinion the idea of Theatre operations which many feel is a natural fallout of the CDS system is not viable in our scenario. It will lead to unnecessary duplication of resources. A cost penalty that the country can ill afford. This proposal stems from a mistaken belief that personnel of all three Services will perform better if "Under Command" However the fact remains that Offrs & men need to accept the importance of functioning in a joint organisation. Lastly, the Importance of Service Chiefs, their freedom & initiative must be maintained with the CDS directing policy & the Chiefs managing within those policy guidelines.

9. The discussions above would bring home to the reader how difficult a transformation this is. The initial framing of rules must be experimental. They should be finalised only after sufficient experience is acquired. I would like to state a few home truths before I end. The whole process of CDS must start with integration of the Armed Forces with MOD. As can be seen, the time frame is about 8-10 years by which the Services need to set their house in order & the Govt needs to remain committed to the idea. Management of Armed Forces in future will require a CDS type of system. Our strategic imperatives will dictate the type of CDS we need. This would be refined with experience. Whichever model is chosen, I say go all out without compromises like a permanent chairman of COSC. I would like to end by quoting from an Australian White Paper on Defence,2000 on how the Armed Forces should be viewed. It states,"The Armed Forces are not only a service provided by the Govt. They are part of Australia's national identity ". Our Armed forces ,too, have, over the last seven decades more than proved that they are a part of the national identity & not just a service.

Air Chief Marshal PV Naik (Retd.)

Air Chief Marshal PV Naik, PVSM VSM was born on 22 July 1949 and commissioned into the Indian Air Force on 21 June 1969. After initial schooling in the Sainik School, Satara, he graduated with the 33 course from the National Defence Academy.

In a distinguished career spanning forty years, the Chairman COSC and CAS has flown a wide variety of combat and trainer aircraft. After initial training on the HT-2, he has flown the Vampire and the Hunter, and has had extensive operational experience on all variants of the MiG-21. He is a Qualified Flying Instructor with vast instructional experience and a Fighter Combat Leader from the prestigious Tactics and Air Combat Development Establishment (TACDE). He was selected as one of the first eight pilots to convert to the MiG-23 BN in the erstwhile USSR, and was responsible for its induction into the IAF. Besides commanding a front line fighter squadron, he has commanded an important fighter base and air force station at Bidar. He has been the Directing Staff at TACDE and the Defence Services Staff College.

During his career, the Air Chief Marshal held numerous important staff appointments in different headquarters. He was the Senior Air Staff Officer at HQ Western Air Command, the Air Officer Commanding-in-Chief of Central Air Command and the Vice Chief of Air Staff, prior to his appointment as the Chief of the Air Staff. He also took over as the Chairman, Chiefs of Staff Committee on 01 April 2010.

The Air Chief Marshal is a graduate of the Defence Services Staff College, and an alumnus of the National Defence College. He is a recipient of the Param Vishisht Seva Medal and Vishisht Seva Medal.

Living with Nuclear Weapons

Air Marshal AK Trikha (Retd.)

It is a little over 45 years since Nuclear Non-Proliferation Treaty i.e. NPT entered into force. In its essence NPT was intended to be a deal between nuclear weapon states and non nuclear ones - the crux being that weapon states would give up their nuclear arsenals in a phased manner and in return non nuclear states would forego the option to weaponize their nuclear potential. The fact that Australia, Sweden and Switzerland along with many potential owners abandoned their quest for nuclear weapons points to the success of the treaty. However its failures on other counts have been much more numerous. NPT did not take into account ground realities and was therefore unable to bring Israel, India and Pakistan under the tent. North Korea brushed aside its treaty obligations in 2003 and went ahead to build up its own arsenal. The future looks ominous too. After reducing their combined stockpile from more than 82000 to about 9000 weapons, US and Russia (the successor state of USSR) appear to have lost the will or incentive to go any further towards disarmament. Instead both are set to commit massive resources to upgrade both their nuclear arsenals as well as delivery systems. Elsewhere the sharpening conflict between Iran and its Sunni neighbors has the potential of acquiring nuclear overtones- thus burying the treaty's ghost forever. Therefore despite the compelling case to move towards a nuclear weapon free paradigm to save the world, the utopia is unlikely to be achievable any time soon.

Indian Subcontinent – Living on the Edge in World's Most Volatile Region

With thousands of nuclear weapons and multiple conflict zones, dangerous as the world is, Indian subcontinent still stands out as potentially the most volatile flash point. Whether or not establishments in the two countries admit it or not, India and Pakistan are caught up in the logic of their own nuclear weapons arms race mirroring US and Soviet 'action – reaction' paradigm during the cold war. Given the trajectory of our mutual history, escape from its vice like grip appears impossible. Americans and Soviets were trapped in a similar web of deadly rivalry and mistrust during the Cold War. Nevertheless they remained constantly engaged in tryign to find ways to mitigate risk of precipitating a free fall towards mutual annihilation. On the one hand they negotiated several arms control treaties to limit the number of warheads and their deployment and on the other they developed sophisticated constraints, controls and signaling methods to ensure that the other side clearly recognized the red lines, thus minimizing the risk of trespass through miscalculation. Despite the carefully crafted and elaborate safety nets, the two sides still came perilously close to sliding towards Armageddon on at least four occasions. As late as in 1995 when bitterness of cold war rivalry had more or less dissipated, Russians stood within 2 or 3 minutes from launching a full scale nuclear attack against the United States. On that occasion President Yeltsin had activated nuclear codes and submarine commanders had been told to wait for launch orders. The event had been triggered when Norwegian and US scientists launched a large sounding rocket from Andoya island off the coast of Norway to study Borealis Aurora. The flight path of the rocket appeared to resemble calculated trajectory of a nuclear tipped US Trident Missile if it were to be launched to blind early warning Russian radars.[1] This was no Hollywood thriller. It was a real brush with the unthinkable. The incident serves to highlight dangers inherent in a nuclearized environment. Despite decades of effort at confidence building and fielding the best possible verification tools and procedures, the world still came close to disaster.

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1   For a brief description see 'False Alarms in the Nuclear Age at http://www.pbs.org/wgbh/nova/military/nuclear-false-alarms.html

When Soviet Union joined the nuclear club from behind the Iron curtain, United States responded by enunciating a doctrine of massive retaliation to deter its adversary from any adventurism. As the Soviets increased their arsenal, peace in Europe became hostage to the certainty of 'Mutual Assured Destruction' if either side dared to cross the other's red lines. However soon it was found that threat of unleashing an all out nuclear war in response to any infringement by the opposite side, lacked credibility and thus yielded the adversary space below a certain threshold level to pursue its hostile activities. This dilemma of an apparent window of vulnerability was attempted to be resolved with strategy of flexible response – implying that rather than an all out exchange leading to assured mutual destruction, any transgression would be met with a limited or proportionate response. Such proportionality was thought to make threat of response more credible and thus served to deter the adversary from taking advantage of any perceived chinks in the armor. With passage of time, leaning on one strategic shibboleth or another, the two superpowers of the time went on to accumulate more than 80000 nuclear weapons in their arsenals – many of them in the megaton range. Considering that consequences of even a single nuclear strike on a modern city would have been catastrophic and a few scores of these weapons would have certainly spelt the end of civilization as we know it, in retrospect the folly of this approach remains simply incomprehensible.

Challenge from Pakistan

India's declared nuclear doctrine rests on threat of massive retaliation in case its 'red lines' are breached. Pakistan on the other hand seeks both to maintain parity at the strategic level as well as to neutralize threat of India's superior conventional capability by resorting to employment of tactical nuclear weapons. It hopes that employment of a few low yield warheads would somehow either stop the advancing Indian army dead in its tracks or otherwise achieve its objectives while limiting the exchange to sub strategic level. Rational thinking would commend that both postures are inadequate to meet their objectives. While India's threat of massive response to any infringement whatsoever lacks credibility, strategy of measured response as adopted by Pakistan is equal nonsense. It is universally acknowledged that nuclear war is neither winnable nor

limitable. The one and only purpose of nuclear weapons is to ensure that they are NEVER used.

Perhaps for the first time in its recent history, following the end of World War II Europe enjoyed an era of relative peace for seven decades. Shadow of deadly nuclear weapons compelled rivals to stay with in the bounds of the other side's tolerance. Can or will the same paradigm of restraint imposed by nuclear weapons withstand the turmoil of our subcontinent's milieu and change the course of our lived history of destructive wars? There is an imperative to it because the alternative is possible annihilation through miscalculation or otherwise by letting chest thumping to seize control of delicate situations.

Having lived on the edge through seven decades of cold war, many strategists have thought long and hard over the vexing problem of how to contain if not eliminate the risk of a nuclear winter. While elimination of risk would be possible only if total nuclear disarmament could be achieved (and it looks more and more like a fantasy), much progress has been made towards finding ways to manage risk. Because nuclear weapons carry the potential of such destruction as to threaten the very existence of the victim entity, confidence that the adversary would not spring a surprise to gain ascendance lies at the core of avoidance strategy. Communication, constraint, verification and transparency are the pillars on which confidence building measures stand. India and Pakistan have struggled to get some going but the trust deficit is so deep that their survivability in a time of crisis remains doubtful. Given the dynamics of Pakistan's internal situation, there is a certain inevitability that serious provocations will continue to occur from time to time. In the event, Indian leadership would come under severe pressure to deliver a swift and robust response. In the past such provocations have been handled with great skill and maturity and there is no reason to believe that future would be any different. However in times of relative normalcy, effort must remain ongoing to strengthen stability of relationship by putting in place more and more meaningful confidence building measures.

Challenge from China

Our other nuclear neighbor China presents a different kind of a problem. Because of our lingering border dispute and China's assertiveness in pressing its claims on vast swathes of Indian territory, it looms large

on our security horizon. Its size, economic heft and close strategic ties with Pakistan leave Indians with an ominous kind of foreboding. Its diligence in putting on ground top class infrastructure along the border and missile deployments in Tibet serve as a constant reminder that China has the means to back up its demands with military muscle. However in our imagination, ultimate nightmare scenario is Sino-Pak collusion in a military confrontation with India. Military and political dimensions of such an eventuality would appear to present a challenge of almost unfathomable proportions. To decide on what kind of insurance we need to cover this risk, probability of such an eventuality should be assessed.

CHINA'S STRATEGIC HORIZON

China is currently engaged in a bitter stand-off against Japan. The dispute over a chain of remote islands (known as the Senkaku in Japan and the Diaoyu in China) certainly has a strategic content but it is also symptomatic of their tense relationship. China holds a deep grudge against Japan for the atrocities that the latter committed against its hapless population while it was weak and divided. It sees in Japan both a push towards serious remilitarization as well as a rising tendency to whitewash its war time past. That is why Chinese see red whenever Japanese leadership makes a show of eulogizing or glorifying their war dead (criminals in Chinese view) by pilgrimaging to Yasukuni shrine.

China as a rising global power also feels almost entitled to dominate the South China Sea both to exploit its raw materials potential as also to radiate its power outwards towards Western Pacific and the Indian oceans. Buoyed by confidence stemming from its spectacular economic success, it is engaged in extensive land reclamation projects on contested islets and reefs in the South China Sea. It is placing its submarines on station in the Indian Ocean, and expanding air and ship patrols into the Western Pacific. This aggressive muscle flexing is putting it at odds with countries like Vietnam and Philippines whose maritime claims conflict with Chinese ambitions. Thus China has a number of confrontations brewing with its neighbors. United States as the dominant power in the Pacific is also determined not to concede its supremacy and is therefore tightening its own alliance networks in the region. The emerging stand-off is likely to dominate the region's landscape in the years to come.

China undoubtedly has very deep pockets and is therefore ever

ready to buy influence with large investments in select countries with a significant pay back potential in terms of its strategic interests. Starved of capital to fund infrastructure needs, many countries in the region have welcomed Chinese investments. However of late there is evidence of the recipient's wariness of Chinese intentions. First Myanmar and now Sri Lanka have either cancelled or put on hold show-case projects being sponsored by China. Therefore in its near neighborhood, China's strategic horizon appears ridden with challenges which must engage much of its attention.

SINO – PAK COLLUSION?

China's only all weather friend in its neighborhood is Pakistan with whom it has had a deep security relationship for over 50 years. Although both deny it, there is sufficient credible evidence to conclude that China assisted Pakistan in making nuclear weapons and nuclear capable missiles by supplying critical materials and expertise. Recently it unveiled a grand plan to invest some $46 b to create an economic corridor linking China's Western regions to Gwadar – a Pakistani port near the mouth of the Persian Gulf. With a sinking economy and foreign investors shying away from bringing capital because of rampant lawlessness, endemic corruption and creaking infrastructure, Chinese bonanza to Pakistan couldn't have arrived at a more desperate time. If the ambitious Chinese plan goes through (and it remains subject to many ifs), it could well put Pakistan on road to sustained economic recovery.

Optics of Sino Pak relationship suggest that it is a win-win alliance for both and that they would stretch themselves all ends to promote each other's interests. However the reality doesn't quite tally with this perception. At a very fundamental level, there is a difference in the nature of the two states. Pakistan was founded on the premise that Muslims of Indian sub-continent constituted a distinctly separate nation and therefore they were entitled to a separate homeland. Because history has belied this premise, Pakistan is caught up in a crisis of self belief. Fearing that it would lose its very raison d'être if it attempts to dislodge itself from its religious moorings, it leans more and more on Islam to consolidate its nationhood. Therefore fringe groups always pushing to deepen its Islamic identity and at odds with all who resist this push, will remain an essential part of Pakistan's political eco-system.

China on the other hand is committed to keeping religion out of its public spaces. Muslim minorities in its remote far Western regions already alienated from mainstream Han Chinese, are vulnerable to the seditious religious propaganda emanating from Pakistan. Virus of extremism infecting a section of Uighur population is already posing a threat to Beijing's authority. Threat could become much worse if one of the extreme Jihadi groups (internal or external) manage to hijack the governance structures of Pakistan.

Pakistan has always been ready and eager to grab any stick it can beat India with. It is also in desperate need of aid / investments to pedal itself out of its dire economic circumstances. China fills that bill brilliantly on both accounts. For China on the other hand Pakistan is useful to dissipate India's energy so that it is free to concentrate on its other priorities elsewhere. Pakistan is also valuable to China for its location because it offers much shorter access to energy sources of the Middle East and to the markets of Central Asia and even Europe without the threat of being choked out by the narrow Malacca Straits. Therefore Sino Pak relationship is born out of current convergence of interests rather than any shared beliefs. In other words, their profession of undying friendship for each other needs to be leavened with a pinch of skepticism to get a sense of its true strength.

The all important question then is whether China will collude with Pakistan to create a military challenge for India. If history of our triangular relationship is a pointer to the future then it doesn't look likely. China has never committed troops on Pakistan's behalf in any of its conflicts with India. During the Kargil war, China refused to support Pakistan diplomatically or militarily. On India's most enduring and troublesome dispute with Pakistan over Kashmir, China's position was laid out by Premier Zhu Rongji when he visited India and Pakistan in May 2001. He had said 'China had always emphasized the need for negotiations between India and Pakistan (i.e. bilateral negotiations) to achieve a peaceful settlement of the dispute'. During the 15 years since then, while Sino Indian relations have bobbed up and down, China's position on Kashmir has remained substantially the same. Even during the recent high profile visit of President Xi to Pakistan, Kashmir did not figure in the headlines. Therefore it is safe to assume that unless there is some tectonic disturbance, China's stance would remain more in

line with India's position than Pakistan's who has repeatedly pleaded for third party intervention to resolve the issue.

CAN SINO INDIAN FENCES BE MENDED ?

To second guess answer to this crucial question, one needs to revert to what lies at the heart of the Sino Indian dispute. At its root it is the vast disparity in Indian and Chinese perceptions related to Tibet that accounts for the thorny relationship.

After sanctifying China's Sovereignty over Tibet in the Panchsheel Agreement, Indian memory of Tibet's recent history begins with Dalai Lama's flight to India. Indians imagine Tibet as a victim of China's repression. Tibetans in exile are seen as refugees who were given political asylum out of humanitarian considerations. China's view of Tibetans in Dharamshala is totally different. It sees them as a well organized insurgent group which mobilizes international sympathy skillfully and uses modern means of communication to keep their separatist aspirations alive. How serious the problem it is for the Chinese can be gauged if one was to view it through the prism of India's Kashmir problem. Size of Tibetans and Kashmiri populations is about the same i.e. about 6 million each. While the valley occupies just 0.13% of India's land area, the area for which Tibetans seek autonomy is not the Tibet as we know it but Greater Tibet which accounts for about 25% of China's land area. It includes the TAR, the whole of Qinghai province, western parts of Sichuan, areas of Yunnan and a corner of Gansu.

Map of Greater Tibet
http://news.bbc.co.uk/2/hi/asia-pacific/7304825.stm

Conceding such a demand would entail wholesale redrawing of China's provincial boundaries. Even more troublesome for the Chinese is the Tibetan leadership's concept of 'genuine autonomy' which in their perception amounts to creating virtually another political system in China. China has historical memory of an earlier Dalai Lama who in the wake of Manchu onslaught had fled to India in 1909, only to return and establish a vast independent kingdom for the next 37 years. Had India not been available as a sanctuary this twist of history would have never come to a pass. The point is that China is paranoid about what could happen in or to Tibet and its attitude towards India is closely related to its perception of the latter's role in the imbroglio.

While playing host to the Dalai Lama has become a routine fact, New Delhi has been extremely careful about Chinese sensitivities. Tibetans in India have been strenuously denied license to indulge in any political activity. However Tibet remains in headlines globally and China continues to be suspicious of India's intentions. Overlaid on this basic dissonance is the fact that as Indian power grows it would naturally compete with China for influence in the region. Therefore at least until Tibet is assimilated in the Chinese mainstream to the extent that ghost of separatism is laid to rest, china's relations with India will remain businesslike at best. Pakistan is a convenient spoiler available to China to tie India down in its own neighborhood rather than challenge it across their long land border or compete with it in the rest of Asia.

Given this state of play i.e. China's anxieties about Tibet and India's extreme caution by denying space for political activity to the Tibetan exiles, it may be safe to assume that while China's relationship with India can not normalize beyond a point, precipitous deterioration is also unlikely. Therefore probability of Chinese collusion with Pakistan in a military confrontation against India could be considered low. Its current strategy of seeing India Pakistan relationship exist in a state of managed mistrust is working brilliantly and is therefore unlikely to change

Chinese development of critical military infrastructure and military deployments in Tibet are a source of anxiety for India. Therefore no matter how little the likelihood of disagreements breaking into armed hostilities, India must continue to develop a matching response in the entire spectrum of conflict. China is likely to keep the border issue alive to distract India with a degree of constant anxiety. However because of

its multiple entanglements elsewhere (both external as well as internal) it is unlikely to force the issue through military means. It would be in India's interest to see that border disagreements remain in the political realm and do not cross over into a military stand –off.

Thus far both governments have worked diligently to contain the fall out from the border disagreements. At the same time by broadening and deepening economic ties, a general sense of calm and stability prevails in the relationship. Existence of nuclear weapons does not threaten to upset the ongoing process of trying to find accommodation within the constraints of conflicting perceptions. Government should promote subtle public understanding that while attempts to resolve the border dispute would remain ongoing, issues are complex and that no solution is likely in the near future. Therefore patience should be the keyword in our approach.

Problems with Nuclear Pakistan

Living with Pakistan's nuclear weapons is far more challenging. One set of problems which need to be addressed arise if nuclear weapons remain under legitimate state authority and another if they fall into rogue hands. The latter is the real nightmare scenario because it is impossible to deter a suicidal maniac. It is to be hoped that awareness of this threat would compel Pakistani establishment to ensure that enough firebreaks are created such that an assembled weapon never falls in unauthorized hands. From this perspective tactical nuclear weapons pose the greatest threat because the nature of their role makes it necessary for them to be in an assembled state and authority of use has to be delegated down to the field commanders. Pakistani armed forces have many middle ranking officers deeply infected with Jihadi ideology. One of them could potentially have a finger on the trigger. Therefore it should be our highest priority to convince Pakistan that it is in its own interest to pull back from this unwise step.

Another potentially disastrous situation could arise if terrorists succeed in smuggling radio active material into one of the big cities in India with a view to unleash a dirty bomb. It could leave large swathes of the city uninhabitable and paralyze civic administration. The only way to safeguard against such an eventuality is to stop leakage of radio active material at its very source. Agencies which can realistically prevent that

from happening lie within ambit of the Pakistani state. To that extent it is in our interest that Pakistan has a stable polity and a strong state whose writ runs through the length and breadth of the country and which can drain the swamp of all terrorist elements. India must strengthen its coastal security, border controls, and disaster management apparatus to forestall the possibility of such an event.

Pakistan's nuclear arsenal under legitimate political / military control renders the terrain more familiar to negotiate steps to reduce the risk of unintended use. A number of confidence building measures are already in place. They need to be strengthened and deepened through regular dialogue. The key however lies in defusing or at least managing legacy tensions which bedevil our relationship. Perhaps time is ripe to realize that both India and Pakistan have failed in their pursuits to bring the other to heal. Despite being far more powerful in every reckonable way (including in military terms) we have not been to restrain Pakistani establishment from its complicity in promoting terrorism in India. No matter how many more nuclear weapons or nuclear tipped missiles we add to our arsenal, this problem won't go away. Pakistan's failure to wrest Kashmir is even more spectacular because it has been identifying that as its core national mission. Strategy chosen to accomplish that has willy-nilly destroyed Pakistan in the process. It is not surprising that there is an increasing awareness in Pakistani civil society of the havoc that fascist religious and military establishments have wreaked on Pakistan and how it has been reduced to a pariah state status in the international community. Fascist religious sentiment has a sway because it seems to define Pakistan in anti India terms. Similarly public adulation of the military is entirely because it is perceived as the shield against the Indian rapier. These perceptions need to be softened through India's considerable soft power. Perhaps the single most powerful message would stem from how India treats its own largest minority i.e. Muslims.

National grudges left over by perceived histories have a strong narrative in public imagination and take a long time (even generations) to be softened. Threat of annihilation with nuclear weapons is real. Since both stand to lose all, political elite on both sides should work hard and persistently to mould public opinion such that the other is not seen as an existential threat. Then and only then we would be able to say that we have bequeathed a future to our coming generations.

Air Marshal Anil Trikha (Retd)

Joined the IAF as a fighter pilot in April 1964. Has flown nearly 5000 hours on fighter and trainer aircraft. Trained as a flying instructor and deputed abroad for flying training of cadets.

Flew a number of missions during the 65 and 71 wars against Pakistan. Was 'Mentioned in Despatches' for conspicuous acts of bravery during the 71 war.

Served as Air Advisor in the High Commission of India in London from 1995 to 1998.

Subsequent appointments include
- Commandant of College of Warfare at Secunderabad,
- Air Defence Commander South Western Air Command
- Commandant National Defence Academy and
- AOC-in-C Southern Air Command.

Recipient of three Presidential Awards for distinguished service during peace time i.e. Param Vashisht Seva Medal, Ati Vashisht Seva Medal, and the Vashisht Seva Medal.

Retired from the Air Force in Jan 2004.

After retirement, appointed Chair Professor of 'Air Power and National Security Studies' in the 'National Institute of Defence Studies and Analysis' at the University of Pune until Sep 07.

Now writes on Strategic Affairs in various journals and newspapers and delivers lectures occasionally at different institutions.

Engaging Bangladesh For Lasting Peace In North East

Lt Gen (Dr) DB Shekatkar (Retd)

Introduction

For almost 60 years entire North East (NE) has faced insurgency, taking North East backward by almost 50 years. For any insurgency, revolt, revolution to succeed, there have always been and there shall always be certain basic requirements, basic factors, "basic cause to fight for". Unless there is a convincing cause to fight for, the support of local population which is one of the most important factor for success of insurgency ; will not be available. People's support is a must. Unless people are convinced in the cause they will not support insurgents, extremists. The causes of insurgency, unrest, revolt can be : desire for independence, elimination of foreign exploitation, relief from alleged or actual oppression, desire for economic and social improvement, elimination of corruption etc. Unfortunately since India's Independence, due to lack of "perception management, capacity and capability management" and "image management capability", people of North East were indoctrinated in justification of all the above causes to fight for.

Foreign Support for Success of Insurgency

In any insurgency, uprising, revolt, there are always atleast four participants. The government in power, local population, insurgents

and external powers, specially the immediate neighbouring countries. Apart from these four, favourable terrain, secured bases (within the area of insurgency and out side), intelligence, mobility and propaganda are important. The key factor for growth of insurgency in North East has been the support from neighbouring countries China, East Pakistan (now Bangladesh) and Pakistan. North East's proximity to Bangaldesh, Myanmar and China has also encouraged insurgents from Nagaland, Manipur, Assam, Mizoram, Tripura and Meghalaya, to use these countries as place to retreat, safe sanctuary, training ground, for procurement of weapons, equipment and safe parking of funds. Pakistan, China and Bangladesh's support for insurgency is linked to larger geo-political rivalries, and geo-strategic interests between these countries. For Pakistan, China and Bangladesh insurgency in North East provided and continue to provide a favourable environment and fertile territory to weaken and destabilize India. Pakistan's interests in supporting the insurgency also had "tit for tat" quality to it, because this support was seen and continues to be seen as "Pay-back" for India's attempt to foster rebellion in East Pakistan, that succeeded when Bangladesh declared independence from Pakistan in 1971. Even after the emergence of Bangladesh as independent nation, successive government except the present (AWAMI League) government in Bangladesh continued to offer support to insurgents in North East as a response to "perceived" and "alleged" attempts to cause trouble in Chittagong Hill Tracts. Despite the loss of East Pakistan, the Pakistan Army, ISI and Pakistani diplomats continued to seek support from Pro-Pakistani elements in Bangladesh specially the Jamat e Islami to destablise North East.

DEEP ROOTED CONSPIRACY AND HIDDEN AGENDA

If the propogated thought process and philosophy of some important political figures in East Pakistan (now Bangladesh) and Pakistan is studied and analysed carefully it becomes clear as to why and how North East become of conflict zone due to foreign involvement.

● In Mid 1950's Sheikh Mujibur Rahman (who later became President of Bangladesh) wrote in the book "East Pakistan : Its Population and Economics". "Because East Pakistan must have sufficient land for its expansion and because Assam has abundant land, forest and mineral

resources, East Pakistan must include Assam, to be economically and financially strong".

- It must be acknowledged and remembered that Nagaland, Mizoram, Meghalaya, Arunachal Pradesh were all part of Assam up to the beginning of 1960s. Nagaland, Mizoram, Meghalaya, and Arunachal became state carved out of Assam in 1960s and 1970s. The author has witnessed the emergence of all these districts in to States.
- Mr Zulfikar Ali Bhutto, the Prime Minister of Pakistan wrote in an article "Myth of Independence".

"It would be wrong to think that Kashmir is the only dispute between Pakistan and India, though undoubtedly the most significant one, one at least is nearly as important as the Kashmir dispute is that of Assam and some districts of India adjacent to East Pakistan".

Detailed analysis would reveal as to why East Pakistan actively supported insurgency in different parts of North East specially in Mizoram and Tripura. Mr Laldenga who engineered insurgency in Mizoram in 1966 continued to enjoy safe sanctuary, protection, training, financial support, weapons and equipment etc for 20 years from East Pakistan. (The author as Major, had entered Mizoram as part of India Army's response to Insurgency in 1966 and was also serving as Colonel in Mizoram when the Peace Accord was signed by Mr Lal Derga, Mizo National Front, and Government of India). Even after emergence of Bangladesh Mr Laldenga continued to get all the support from Pakistan through Pro-Pakistani elements specially Jamat e Islami of Bangladesh.

Insurgency in Tripura and Assam was also supported by Pakistan through Bangladesh. The situation is gradually changing after the present Government of Awami Leagre has come into power in Bangladesh. Shri Manmohan Singh the Prime Minister of India after his visit to Bangladesh had stated clearly and officially that "there is a good percentage of people in Bangladesh, specially the religious hardliners and fundamentalist who support and sustain Pakistan's grand designs to keep North East in a state of unrest and violence. This is based on the designs of ISI and Pakistan Army to keep India focused and keep Indian Army as well as security forces committed in North East, at the cost of security of Western and Northern border and LOC with Pakistan.

Western Interests and Perceptions of North East India

AZ Phizo who had engineered the insurgency in Nagaland was given shelter and support in Britain and some other European countries through religious organizations and NGOs. Where as the self styled Commander in Chief of Naga Army Mau Argami and his group of insurgents got training, weapons, equipment, training and funds from China. What was the connection between China and Britain ? (The author had tracked the insurgent gang in May 1969, comprising of 300 insurgents under Mao Angami which was returning from China to Nagaland from a Town Hkampti in Myanmar to Phisami in Tuensang District of Nagaland for 8 days. The gang was surrounded and disarmed under the leadership of Brigadier (later General) AS Vaidya who was the Brigade Commander, and Lt General Manekha (later who was elevated to Chief of the Army Staff and Field Marshal) the General officer Commanding in Chief of Eastern Command. The present top leadership of NSCN (lm) was part of this gang). Such are the foreign connections even today ! It would be interesting to read the statement of Mrs. Indira Gandhi the Prime Minister made on 13 Oct 1975.

A study was conducted by Western Think Tank about the feasibility of carving out of Independent Nation out of North East ! Report by Agencia – International De Prensa (International Press Service) was released in 1966. The study was conducted about possibility of carving out "United and Independent Bengal" comprising of East Pakistan, West Bengal, Assam, Manipur, Tripura and Sikkim. The study was based on assumption that "the separatists and insurgents are counting on USA and other Western powers to give them necessary assistance. They are confident that these powers would be interested in establishing an independent state in "South East Asia" which could help to normalize conditions there and provide shield against Chinese Aggression". Such perceptions should explain as to why China and Pakistan through East Pakistan were sustaining insurgency in North East. Insurgents in North East continue to get Chinese help even in 2015.

Another example of Western interests in North East was "Project Brahmaputra". A special research cell was established at George Washington University with the approval of US State Department. The objective was to conduct research on North East and Sikkim to "throw light on public opinion in the region to establish in what measures

the present status of the state remain acceptable or whether there are indications, that the formation of a New State is a current problem". This project was launched towards end of 1960's.

It is certain that foreign countries are keeping a close watch and contacts with the insurgents in North East even today in 2015. The Large Scale illegal migration from Bangladesh in North East is not only economic or employment issue ; but this is also a part of "grand design" to create a voting constituency based on vote power of illegal migrants and capture political power in Assam to start with followed by Tripura, Meghalaya in due course of time. There are indications that the Chief Minister of Assam by 2026 will be a person of Bangladeshi origin or a person claiming to be from Assam from a specific community, duly supported by illegal migrants who have acquired voting rights and continue to expand their influence and strength. The funds for such ambitious designs are collected from the some sympathizers and supporters based at Maharashtra, Sema Andhra, Karnataka and Kerla and of course Middle East. The threats issued by Al-Qaida, Taliban, ISIS have meaning and purpose. Ofcourse some experts sitting at Delhi's air conditioned rooms will not agree with such predictions. At least three Governors of Assam and two Corps Commanders dealing with ULFA and BoDo insurgency have warned the Central Government at Delhi about the dangerous implications of "Strategic Migration" and "demographic imbalance" in North East and specially in Assam. Illegal migrants have already impacted the social, political and economic landscape of Bengal. There is a gradual spread of this cancerous growth of "strategic migrants" into Jharkhand, Bihar and Chhattisgarh provinces. To protect the interest and security of the illegal migrants, the extremists organisation like Bengal Tiger Force (BTF), Muslim Liberation Tigers of Assam (MULTA) have been formed and are active. Such organizations can always be used as Vanguard and sleeper cells for AL-Qaida, Taliban, and ISIS when the need arises. These organizations are operated by ISI of Pakistan through cells in Bangladesh.

During the BNP regime in Bangladesh the insurgency in North East got encouragement and boost. A large number of sleepers cells had been established in North East and other parts of India. It is reported that ISI and Pakistan Army had outsourced insurgency and terrorism in North East and East India to BNF and Jamat. The operatives of Special Service Group of Pakistan and Al-Qaida were operating in Bangladesh to train

the insurgents of North East and extremists of Indian Mujahideen (IM), Harkat-UL-Jihad-al-Islami (HUJI) and SIMI. It is only a matter of time when these organizations will get aligned to the most dangerous terrorist organisation ISIS.

In Meghalaya new criminal organizations are emerging under the garb of insurgent organizations. Prominent among them is the Garo National Liberation Army (GNLA). These outfits are involved in large scale smuggling and trafficking to include illegal immigrants from Bangladesh and smuggling of Cottles, narcotics, minerals including coal, cement etc. and worst of all the smuggling of "raw uranium" are through Bangladesh. This can assume dangerous proportions one day. The uranium are must be going beyond Bangladesh to some part of the world. There is likely hood of links between terrorist organizations. Thanks to smuggling of nuclear technology under Mr AQ Khan of Pakistan, it is reasonable to assume that the technology smuggled out of Pakistan is preserved and perfected by some non state actors under the protection and support of a recognized state.

The important point to consider is as to why Bangladesh became a safe heaven for the insurgents from North East ? It need to be considered that Pakistan did not want India to succeed in Bangladesh. USA, UK and China did not want India to succeed in Bangladesh. Both Pakistan and China would like to retain Bangladesh as launch pad against India. North East is just part of it. It was unfortunate that India's political leadership, governing and security mechanism, was not clear or keen on establishing a permanent influence in Bangladesh. Fortunately with the change of political and national leadership in India things have started improving since 2014. "Influence" in Bangladesh should not be misunderstood or misinterpreted as dominance over Bangladesh. Both Bangladesh and India have common history, culture, language, food habits, source of river water, agriculture, means of sustenance and also common threats from man made disasters as well as natural disasters. With so many commonalities and similarities between the two nations and two neighbours the future and destiny of our coming generations will be same and together. It is therefore essential that both Bangladesh and India must remain engaged to ensure safety, security, progress, prosperity and peaceful co-existance for the good of our people and coming generations.

How should India Engage Bangladesh to Ensure Peace, Stability, Progress and Propospirity in Bangladesh ?

It is hearting to note that the present government in Bangladesh and even the leadership of armed forces of Bangladesh have realized the philosophy, importance and need for peaceful co-existance. A good number of positive steps are being taken by the Government of Bangladesh. However "misdeeds" of the previous BNP Government and the "mind set" towards India, of the political leadership and hardliners as well as fundamentalists will take a long time to be erased from the minds of youth of Bangladesh.

In the recent past there have been major recoveries of arms cashes in Bangladesh and also the inception of large quantity of weapons and ammunition at sea ports, which were meant for insurgents and terrorists organizations operating in North East and other parts of India. The present government in Bangladesh has initiated steps to ensure that the transit routes of weapons through Bangladesh are blocked. Bangladesh has also banned a number of terrorist groups operating in Bangladesh. Most of these groups have links with insurgents in North East and terrorists in India. In last few years the present government has arrested prominent ULFA leaders and operatives. The government is also attempting to trace and track the bank accounts and transactions being operated by ULFA and their supporters, in Bangladesh. Periodical meetings and contacts between border security forces of India and Bangladesh as well as intelligence agencies, hopefully should create a functional understanding and effective mechanism to deal with insurgency and terrorism.

To restrict the uncontrolled illegal immigration of Bangladeshi citizens into India there is a need to help Bangladesh to improve agriculture, industry, economy, commerce, trade and shipping. Attraction of employment and means of sustenance attract the immigrants into North East and other parts of India. There is a need to strengthen magnetic factors in Bangladesh so that the people specially youth do not drift towards magnetic force for human sustenance and livelihood in India. India should take a lead and seek investments into Bangladesh for economic upliftment. Nowhere in the world the walls and border fencings have been able to fully stop migration of human beings. There is a need to improve conditions so that people do not get attracted and motivated to leave their own country and migrate to other countries.

Infrastructure development, rail, road connectivity and sea part as well as airport development will generate employment to Bangladeshi nationals. This will result in saving of cost of fuel and transportation, as well as transit losses and time. There is no harm to study, analyse and understand the reasons as to why China is investing heavily to build infrastructure, rail, road, pipelines through Pakistan to China. This is why China has invested heavily at Gwadar port. This is why China is developing new silk route to Europe and Middle East. This is one of the reason China has invested heavily to transport goods from Bay of Bengal, through Myanmar to South China. India should assist Bangladesh to get funds from Western countries and world financial institutions. The development projects and process, should not be blocked on the pretext of security concerns as has been the case so far.

With due consent from Government and people of Bangladesh India can help in increasing agriculture production, livestock, poultry, marine products vegetable, and milk production and so on, for which there is a great demand across the world, specially in Middle East. This will create meaningful and gainful employment to young generation of Bangladesh.

Private academic institutions and Ministry of Human Resource of Government of India should open academic institutions specially Medical and Engineering Colleges and skill development institutions to train less academically qualified youth. India should help Bangladeshi youth to be absorbed in any part of the world based on advance skills needed in 21st Century. Establishment of training facilities to meet the increasing demand of merchant shipping across the world will open new avenues to the youth of Bangladesh. Shipping industry is on the path of growth and needs trained, skilled, human resource across the world. There is an age old philosophy that it is the interdependence of economic, survival, stability, progress and security that reduces the chances of conflicts between the nations, specially the neighbours. Stability, peace progress and security of India, Nepal, Bhutan, Bangladesh and Myanmar are interlinked and interdependent due to our common interests, future and our destiny.

India can assist Bangladesh in disaster management mechanism. Natural and manmade disasters, force and at times encourage people to migrate to other places, other nations to seek means of survival and

economic gains. The geographical location of Bangladesh, climate, environment, demographic realities, sea coast, are akin to India's coastal region. Same hold good for the hilly region of North East, Bhutan, Nepal and Myanmar. In fact India should take a lead to establish a disaster management mechanism and response system for the entire SAARC region to start with and later extend it to ASEAN region. India could also take a lead to launch a space surveillance system to cover Bangladesh, Myanmar East and North East, Bhutan, Nepal and Andaman Nicobar for advance weather, climatic, environmental warning and quick disaster management response.

Without harbouring a big-brother attitude, India's governing mechanism should assist Bangladesh to ensure stability, security, peace, development and prosperity. India's recent initiative in May 2015 to solve the long standing old emotional issue of enclaves is a very good political and diplomatic gesture on the part of present Government. This has been done in consultation with and with the consent and co-operation of Nepal and Bhutan Indian could also establish a common energy and electricity grid which can cater for the electricity requirement of Nepal, Bhutan, Bangladesh, North East and Bengal. There are many more such areas where there is a scope to work together and ensure meaningful, bright, future for the coming generations of Bangladesh and North East.

ISSUES FOR CONSIDERATION

If the state governments of North East, the people, the young generation as well as the Central Government is serious to resolve the insurgency in North East (which has taken back North East to 50 years in development), and the same will hold good for the people of Bangladesh also to neutralize the extremists, hardliner fundamentalists, the separatists etc.) following needs to be considered honestly and seriously :

● Do we wish to manage insurgency, militancy or we want to eliminate insurgency ? Continuation of insurgency, terrorism, unrest becomes a source and mechanism to make easy money. It is across the world and North East is no exception. Insurgency in North East has now become a "cottage industry" to make easy money without any hard work and investment.

- What is important, short term momentary results or long term sustainable gains for the coming generations ?
- What is important from Nations point of view and what is urgent from immediate narrow, political point of view ?
- Criminalisation of insurgency and militancy. Almost all insurgent organizations in North East today are nothing but criminal armed gangs.
- Are the people, youth of North East and the state governments serious to eliminate insurgency ?

<div align="center">CONCLUSION</div>

Finally, based on my combat experience of four decade of which 22 years has been in North East combating insurgency (from the rank of Captain from 1964 to the rank of Lt General in 2001), having combated terrorism in Punjab and Kashmir, I am a firm believer and advocate of the philosophy that :

Do not believe in the alliance of money and machine guns.
Your children will not inherit money, but the machine gun
Which will kill them and others.

The average life of a insurgent, terrorists, extremists across the world is just 17 years. Why people want to get killed at young age ? People in North East and most importantly in Bangladesh must seriously consider this harsh unacceptable reality and truth and lead a normal peaceful and progressive life.

Lt Gen Dr. Db Shekatkar, Pvsm, Avsm, Vsm (Retd)

Lt. Gen. Dr. Shekatkar (Retd.) Served in Army for 4 decades.

He participated in India-Pakistan war in 1965 in Kashmir and in 1971 in Western Theatre. He trained Mukti Bahini in Bangladesh before war of liberation. During Kargil war in 1999 he was in-charge of entire China front in Arunachal Pradesh, which is claimed by China and is now called by them as South Tibet.

He was in-charge of border management with China in Arunachal Pradesh, Myanmar, Bhutan and part of border with Bangladesh. He served extensively in North East combating insurgency (internal Revolt) in Assam, Nagaland, Manipur, Mizoram, Tripura and other areas. He served as member of "Joint Working Group" dealing with India-China boundary other disputes. He also served as member of "Expert Group" dealing with boundary dispute. He was member of drafting team of Peace and Tranquility Agreement signed during Prime Ministership of Shri Narsimha Rao. He has participated in negotiations with China and also with Pakistan on Siachen Glacier issue.

He served in Bluestar operations in Punjab and later, combated terrorism as Brigadier in Punjab, as Major General in Kashmir and as Lt General in Assam and other parts of North East India. He has experience of controlling communal violence in Gujarat and Uttar Pradesh.

He served at Army Headquarters, New Delhi as Deputy Director General of Military operations, as Additional Director General of Military operations and as Director General of Perspective (Strategic) planning. He was member of India-USA Defence Cooperation and Strategic Partnership initiatives. He forced a record number of terrorists in Kashmir (1267) trained in Afghanistan and Pakistan to give up terrorism and lead a normal life. This is a "record" probably in the world, after II world war where terrorists indoctrinated by "Religious Fundamentalism" gave up terrorism.

He has Co-Authored 12 books on Security, Terrorism, Internal Security, and Intelligence. One book has been published in USA by Centre for American and Global Security, Bloomington.

After retirement he served as Chair Professor in Department of Defence and Strategic Studies, University of Pune. He is National President of Forum for Integrated Security of India.

He is associated with Large Number of Academic Institutions in Advisory Group and Governing Councils. He devotes his time and energy to prepare the young generation to face challenges of 21st Century.

India`s Quest for Permanent Membership of United Nations` Security Council

Shri Gautam Sen

Present Context – A Negotiating Text for Reform Emerges

Sam Kutesa, former Foreign Minister of Uganda, on assumption of charge as President of the 69th United Nations General Assembly (UNGA) (2014-15), had stated that, the ``world is vastly different what it was in 1945``, inter-alia mentioning that ``the changing world obliges us to adjust to new and challenging realities. Central to that is the continued re-vitalisation of the (United Nations) General Assembly and reform of the (United Nations) Security Council.`` Sam Kutesa had then lamented that the inter-governmental negotiation process on United Nations Security Council (UNSC) reform had not made the desired progress (1). However, before relinquishing charge as President, Mr. Kutesa was successful on 14th September, 2015 in getting a negotiating text adopted through consensus by the 69th session of the UNGA for further inter-governmental negotiations on reform of the UNSC (2). This development has significance for India, which presently considers itself a legitimate country for permanent membership of the UNSC by virtue of its geopolitical and economic status. India along with Japan, Germany and Brazil are members of the `Group of Four` UN member countries who consider themselves as prime claimants of new permanent UNSC member status.

Text without Clarity

The negotiating text (3) is not an ideal document because it deals with the views of various UN member countries in general terms, does not indicate a clear precise objective, the modality to achieve it and the time-frame in which the final outcome is to be attained. While some UN member countries have described the adoption of the negotiating text (which was adopted without voting) as a landmark event, others have opined that this is as a roll-over of the matter from the 69th Session to the current 70th Session. While Russia has not been supportive, Peoples` Republic of China or PRC have strongly criticized the document as `cutting into pieces` the integrity of membership and the spirit of earlier decisions. Pakistan – an old UN member State, has gone to the extent of accusing the 69th UNGA President of adopting a flawed process and arbitrary action and imposing the negotiating text on the members without allowing a consensus-driven document to emerge for consideration of the 193 UN member States (4). The fact of the matter is that, for nearly two decades, the issue of reform of the UNSC has been dealt with in the UNGA forum and through inter-governmental exchanges outside the world body, without any final outcome, and even on principles on which the reform process could be initiated within the UN Charter provisions. Therefore, India`s prospects of becoming a permanent member of the UNSC, may not be very bright in the next one or two years, unless the international power disposition changes drastically in India`s favour or the country achieves a higher degree of national consolidation accompanied by socio-economic growth and military capability.

Inadequate Progress in Open-Ended Working Group of UNSC

At present, only five countries viz. USA, Russia, UK (Great Britain), France and PRC are permanent members of the UNSC. Since 1992, the UNGA had started discussions on UNSC reform, and also established its subsidiary organ: the `Open-ended Working Group on the Question of Equitable Representation on the Increase in the Membership of the Security Council and Other Matters related to the Security Council` through UNGA Resolution 48/26 of 10th December 1993.(5) However, substantive progress has not been possible towards achieving the end objective. Therefore, notwithstanding the infirmities

in the negotiating text, its adoption by the 69th Session of the UNGA based on a groundswell of support from many Afro-Asian and Oceanic countries, may be deemed a progressive development from India`s point of view. Till this development, negotiations were not on a chartered course with many governments trying to obfuscate the matter for their own international political concerns. Without a text, it was convenient for many countries to avoid taking definitive positions on the need and format of change in the status and constitution of the UNSC, which they will have to do henceforth. After the latest developments, India has necessarily to work out postures and assess various alternatives related to its national interest in the world and also in the regional contexts, on the reform process and outcome it would like to achieve.

HISTORICAL CONTEXT – YALTA VOTING FORMULA AND VETO

The restriction of the veto powers (i.e. the powers to disagree or not cast an affirmative vote along with at least nine UNSC members on any issue, in terms of the UN Charter) (6), to the five permanent members countries viz. USA, Russia (earlier the Soviet Union), UK, France and China (initially the Kuomingtang regime based in Formosa represented China, but later PRC, took its place), is an anachronism today. The veto assigned to the above-mentioned five countries in the UNSC, was based on the `Yalta voting formula` drawn up (at USA`s instance and proposed secretly at Yalta but later built into the UN Charter), by the three dominant powers which conducted the Allied Second World War campaign i.e. USA, Soviet Union and UK (Great Britain). In the closing stages of the War, USA`s President Franklin Roosevelt, Soviet Premier Marshal Joseph Stalin and British Premier Winston Churchill agreed on this formula, at their summit conference at Yalta in February 1945. These leaders had then conceived an world order controlled or dominated by their countries, and what they perceived as their concomitant and inherent responsibility to maintain world peace. There was no space left for third countries to influence the world order. This view was perhaps logical for some time post-1945, because of the military preponderance of these countries, notwithstanding the gradual germination of movements among different Afro-Asian nationalities, for self-determination or freedom, from colonial rule of Western powers.

Changed Scenario

The situation has vastly altered over the past 70 years since the United Nations (UN) organisation came into existence on 24th October, 1945 (7). So far military strength is concerned; there are three more powers at present, with declared nuclear weapons` capability and also substantial conventional military capacity viz. India, Pakistan and North Korea, apart from the five who are established nuclear weapons` powers i.e. USA, Russia, UK, France and PRC. In addition to these eight countries, there is Israel, which has not demonstrated or declared its nuclear weapons` capability, but is reported to possess an undeclared nuclear weapons` arsenal. South Africa, a third world nation, is also regarded as a threshold nuclear weapons` power. Japan and Germany, are also considered scientifically and industrially advanced countries with latent capacity, to develop nuclear weapons at short notice, but who have not crossed the nuclear threshold owing to commitment to their security by their nuclear allies and their web of military alliances with USA. In this backdrop, restricting permanent UNSC membership to the only five existing members, and that too with veto powers, on the premise that, these countries only, will have a critical role in the maintenance of world peace and order, does not seem logical.

Security Council: Diluted Powers or More Democratic

Furthermore, the relative economic strength of countries have also changed significantly vis-à-vis the position prevailing in the immediate post-World War-II or the Cold War period of the 1950s and 60s. India today, has the world`s eighth largest economy in terms of gross domestic product (US dollar equivalent of – 2.07 trillion), after USA, PRC, Japan, Germany, UK, France and Brazil.(8) In terms of manpower and productive capacity, India, with the second largest population, a large territorial expanse and a significant industrial base, has a huge economic potential. In terms of the above-referred factors, India with its present status, and also a positive track record of adherence to the UN Charter and substantial contribution to the UN Peace-Keeping Missions, can rightfully stake its claim for a permanent membership of the UNSC. India, while striving for its goal of permanent UNSC membership consonant to its present and also perceived future military-economic status, has to adopt a well-considered view on whether it would prefer

a permanent membership with or without a veto power. India will have to take a well thought-out position on whether it would endeavour for a reform which leads to an expanded UNSC including India but without two category of members ie. with and without veto power, and instead the organ taking decisions based on majority voting or under certain minimum voting thresholds such as 2/3rds majority of UNSC members, etc.

Less Marginalised General Assembly

The need for reform, towards bringing about an equitable world order rooted in the UN, is undeniable. The reform process has necessarily to encompass the UNSC, which is a key body in the UN structure, entrusted with responsibility for maintaining a peaceful world order, investigate disputes and situations which might lead to international friction, determine an aggressor country, take military action against it, etc. within the purview of Chapters (VI-VIII) of the UN Charter (9) . Expansion of the UNSC seems to be a way in the direction of making the UN more responsive to the needs of an expanded and diverse comity of UN member countries. However, shifting of powers by reform of the UN Charter, from the UNSC to the UNGA, which is the actual representative body of its member States, may also be deemed a pressing need. During the just concluded general debate In the 70th session of the UNGA, the Eritrean Foreign Minister, Osman Saleh aptly summed up the pent up feelings of many of the Third world UN member States by stating ``--UN organisation itself is a reflection of -- unfair, unequal and undemocratic global order – overwhelming majority of nations are marginalised. This assembly (UNGA) of nations , should be the most powerful organ, is bereft of real power and influence, with decision-making dominated by a few -- .``(10)

India Not To Contest – Favours Consensus

India had adopted a cautious and realistic approach on UNSC membership, after its independence. Prime Minister Pandit Jawaharlal Nehru had observed in September 1955 that, his ``Government certainly think that Asian representation (in UNSC) is inadequate. ---- Government thinks that this question of amending the Charter should not be taken up immediately. Later, of course, the matter will probably

come up.``(11) Pandit Nehru had also stated in early 1960, though in a slightly different context (on India contesting for a membership for a non-permanent seat in the UNSC), that he had never been in favour of India thrusting forward and canvassing for seats in various UN Councils and Committees. Pandit Nehru then, was of the view that, where there is a good chance for India to be elected with the goodwill of others, the latter should stand for election, but where the country has to oppose newly independent countries especially, he would not stand for such contests. (12) This view of Pandit Nehru had been consistent throughout his premiership. One reason for such a stand of Pandit Nehru was obviously to avoid getting into contests with other emerging and middle-level Afro-Asian nations.

A More Representative UN

Pandit Nehru was more keen to ensure that the Afro-Asian nations consisting of majority of the human race, is able to obtain their rightful representation under the UN system, and particularly in the UNGA. This stance also explains his advocacy of the PRC - in effective control of Chinese territory after the successful Communist Revolution in 1949, replacing the Kuomintang regime of Formosa, and taking its justified place as an UN member and also with a permanent seat in the UNSC. In this backdrop, there was no discernible inclination in the Indian government establishment to formulate a workable policy for achieving eventually a permanent membership of this crucial UN organ i.e. the UNSC. India however, attempted and achieved non-permanent membership {non-permanent UNSC members are elected by the UNGA for a two-year non-renewable term, but can be re-elected after a time-gap) of the UNSC from time to time, depending on the consensus it could muster in its favour among Afro-Asian countries, to occupy such a seat on a rotational basis under the existing UN Charter provisions for filling up the ten non-permanent seats in the UNSC. India`s interest for a permanent seat in the UNSC therefore remained dormant till the mid-1960s, or rather till PRC became a manifest nuclear power after its atomic over-ground test at Lop Nor(in north-west China) in 1964. It is noteworthy that PRC was still to replace Kuomintang China in 1964 in the UNSC, and India`s relations were not on the best of terms with PRC at that time, shortly after the Sino-Indian conflict of 1962.

INFLUENCE THROUGH SECURITY COUNCIL OR NON-ALIGNMENT

India had tried to created space for itself and other Afro-Asian countries in the international arena through its advocacy of the Non-Aligned Movement. There was also a view within Government of India that, by participating as a permanent member of the UNSC, India on occasions would have faced certain compulsions to adopt unambiguous positions on contentious issues emanating from policies and actions of super-power lead blocs to the detriment of interests of the newly emerging de-colonised countries and also its own interests. In a hypothetical situation where India could not accept a majority view in the UNSC owing to certain principles and her national interests, New Delhi would have been in a dilemma on whether or not to exercise a veto as a permanent member. While such likely scenarios must have weighed with Govt. of India, Pandit Nehru had also realised that, in the then-prevailing tense international milieu, it would have been very difficult to garner international support for India`s permanent membership of the UNSC, given the rigidity of postures of the super-power blocs on international issues and their geopolitical interests. Moreover, he felt that, India would not be necessarily advantageously placed by becoming a permanent UNSC member. Instead, India stood a better chance of influencing critical international issues, such as those involving Indo-China, the Middle East and nuclear disarmament, by working in tandem with Afro-Asian emerging powers like Egypt, Indonesia and PRC, and a socialist country like Marshal Josep Tito`s Yugoslavia – then struggling to thwart the pressures from the Soviet East European bloc to conform to Moscow`s policies.

THE PAKISTAN FACTOR

The Pakistan factor had also loomed large in India`s perception, on whether to seek UNSC permanent membership. The situation had been aggravated with Pakistan`s membership in USA-lead military alliances such as Central Treaty Organisation (13) and South East Asia Treaty Organisation (14). India had viewed such alliances as seriously militating against its strategic interests. Pakistan had tried to invoke support of these alliances in its armament drive and military plans and also on the Jammu & Kashmir (J&K) issue towards pressurising India to conduct plebiscite and military disengagement under UN monitoring, in that state. This was

deemed against India`s interest of ensuring non-interference of external agencies and mechanisms (including the UN) in the area considered an integral part of its territory. In such a backdrop, it was considered inconceivable by New Delhi that, USA would have been supportive of any Indian attempt to become a permanent UNSC member. USA would not have liked to countenance a situation where, India would have been in a position to block (by vetoing) any resolution in the UNSC sponsored at Pakistan`s behest on J&K or towards management of the security environment in India`s periphery, which served the interests of one or more of the Western alliance member countries.

Impediments – Uniting for Consensus Group

The position of India in relation to her interests under the UN system, were to an extent adversely affected since the latter half of the 1960s, consequent on aggressive Pakistani maneuvering against India in the Afro-Asian countries through the Islamic bloc of more than 50 countries, known as the Organisation of Islamic Cooperation (OIC) (15). India was prudent enough to reckon that, any move for permanent UNSC membership at that time, would have been negated by Pakistan with the likely support it could muster through the OIC. Even now, Pakistan and a relatively small group of countries including Italy, Turkey, South Korea and Argentina have banded together in a combine known as the `Uniting for Consensus (UFC) Group`, to oppose the latest move for expansion of the UNSC by including India, Japan, Germany and Brazil. The UN reform process is therefore expected to be a long-drawn affair. It is doubtful whether the impediments likely to be posed by Pakistan or the UFC group, can stall the reform process. Furthermore, there is lack of explicit enthusiasm among USA, PRC and even Russia, in regard to India`s claim to permanent UNSC membership. It will therefore be interesting to observe how India, in the evolving multilateral milieu with latent and explicit opposition from some UN member States, can successfully steer the UN reform process towards a more democratised outcome.

UN in Tune with Multilateralism

The major military and economic powers will necessarily have to reckon the dynamics of the present international system. They cannot

be oblivious to the changes in the global power disposition, and will have to dovetail their policies in harmony with their national interests, in a manner that they can ensure better outcomes in a multi-polar environment. The international scenario is evolving in a manner where, multilateralism seems to be the order of the day, and inter-se position of countries will depend on their economic strength, capacity for growth in comprehensive terms including in the human developmental realm. An UN structure which does not facilitate optimum multi-polar engagement and management of the concomitant international milieu in tandem, will only create international disharmony and instability. An UN system which allows the UNGA to be the ultimate body to reflect the will and consensus of the international community, while entrusting the UNSC with authority to work and decide on a more representative basis with due cognisance of present and near-future economic, political and military capabilities of the UN member countries, is likely to endure.

Substantive UN Transformation

India should therefore work in a focused manner towards achieving permanent membership of the UNSC in the first instance. A realistic approach would be to facilitate a more democratic functioning of the UNSC, which can come about only if the restricted veto system is done away with. This will be a difficult proposition because none of the present veto-wielding permanent five members will like to give up this privilege. A radical transformation of the UN system may be possible if, the exercise of a veto in the UNSC is subject to ratification by the UNGA - which is the de-facto representative body of the UN member States or at least a core group consisting of say, half or 2/3rds of the UNGA members. Without a substantive transformation of the UN power structure, the world body will lose its impact in the evolving multi-lateral international milieu, and also its relevance for majority of Third World nations. A reform as outlined above, will also counteract against proclivities of certain dominant power groups to indulge in perverse acts within the UN system without due cognisance of the interests of people affected or promote institutions and regimes adversely impinging on national sovereignty of some States. Amending the UN Charter for UN reform, will be a very difficult process. Whichever government is in power in New Delhi, will have to persevere in the matter, while consolidating

India`s growth with a modicum of internal political consensus and the least of domestic schisms. Another sine qua non for New Delhi to attain its objective apropos UN reform, is that the South Asian backyard, even if not a milieu of total harmony, India should not be the odd nation out there.

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12. Letter to B. N. Chakravarty, Special Secretary : Ministry of External Affairs on 4th April, 1960 {No. 148 (page 325) Selected Works of Jawaharlal Nehru : Second Series : Vol : 59 : 26th March – 14th April, 1956} : Jawaharlal Nehru Memorial Fund

13. Central Treaty Organisation, originally known as the Bagdad Pact, was a military alliance formed in 1955 consisting of Iran, Iraq, Pakistan, Turkey and UK. Though set up at the behest of USA to control Soviet Union`s influence in West Asia and the Middle East, the former joined the alliance`s Military

Committee only. Iraq withdrew from the alliance after overthrow of the Iraqi Monarchy in 1958, and the alliance was formally dissolved in 1979 after the Iranian Islamic Revolution.

14. South East Asia Treaty Organisation, a military alliance consisting of USA, UK, France, Australia, New Zealand and three Asian countries viz. Phillipines, Thailand and Pakistan, was set up in -- to counter Communist influence in South East Asia. Pakistan left the alliance in 1973 and the latter was disbanded in 1977.

15. Organisation of Islamic Cooperation (formerly known as the Organisation of Islamic Conference), was set up in September 1969 with 57 States, after the arson of the Al-Aqsa Mosque in Israeli-occupied Jerusalem. The Organisation seeks to promote interests of the Islamic countries politically and socio-economically in harmony with the provisions of the UN Charter and other international organizations. Pakistan has tried to use the Organisation as a medium to promote its own anti-India interests and has successfully prevented India from becoming a full-fledged member of the Organisation, despite the latter having the third largest Muslim population in the world.

SHRI GAUTAM SEN

Shri Gautam Sen is a retired officer of the Indian Defence Accounts Service (1976 Batch) of Govt. of India. The officer has been a student of Economics and International Relations and had served in different appointments with Union Ministries of Defence, Information & Broadcasting, Home Affairs and External Relations. A substantial part of his service has been in an environment of Indian armed forces operations eg. under 'OP Pawan' in Sri Lanka (when he was Financial Adviser to India's High Commissioner in Sri Lanka vis-à-vis Indian Peace-Keeping Force's operations), and in the North East and Jammu & Kashmir. He also served as Additional Controller General of Defence Accounts of Govt. of India. The officer's North East experience encompasses responsibilities discharged as Financial Adviser of North Eastern Council & Assam Rifles under Union Ministry of Home Affairs and his present assignment as Adviser (Finance Commission matters) of Govt. of Nagaland and Adviser to a former Chief Minister of a North East State & sitting Member of Parliament.

Bajirao Peshwa: A Military Genius

Major General Shashikant Pitre (Retd.)

Chhatrapati Shivaji Maharaj and the First Bajirao Peshwa are the two military legends of Maharashtra. Their military genius is unparalleled. While Shivaji was a pioneer of mountain warfare, Bajirao excelled in plain warfare. Born within 70 years of each other, they left behind a proud legacy which signifies the rich military heritage of Maharashtra. Shivaji established Maratha Swarajya based on Konkan and adjoining areas in the later part of 17th Century, while Bajiirao turned it into Maratha Empire spanning portions of North India, Central India and the Deccan during the first half of 18th Century.

Bajirao Peshwa is probably a single instance of a warrior general who, in a short span of twenty years, fought close to forty battles without losing even one. Field Marshal Montgomery in his famous book, 'A Concise History of Warfare' says, "They (Marathas) were at their best in the eighteenth century and the Palkhed campaign of 1727-28 in which Bajirao outgeneralled Nizam- ul Mulk is a masterpiece of Strategic mobility." Prof V G Dighe in his book ' Peshwa Bajirao I and Maratha Expansion' aptly records, " Bajirao's achievements may be summed up as the establishment of Maratha supremacy in the Deccan and of political hegemony in the North. When he was called to Peshwaship in 1720, the Maratha state was in a perilous condition. It was a house divided against itself menaced on the East by the great Nizam-ul Mulk, its march southward barred by another power and a large part of on the western

seaboard yet in foreign hands. At his death he left the nation strong and united, its friendship solicited by Rajputs, the Bundelas and its alliance courted by the Mughal rulers. The policy of northward drive the Peshwa pursued so vigorously soon brought the Marathas to the gates of the imperial city and made them the dictators of the imperial policy." Grand Duff, the eminent British historian in his book 'the history of Marathas' writes, " Brave as soldier as well as a statesman, Bajirao united the enterprise, vigour and hardihood of a Maratha chief with polished manners, the sagacity and address which frequently distinguish the Brahmins of the Conkan (Kokan). Unlike most of the Brahmins it may be truly said he had both- the head to plan and hand to execute".

ILLUSTRIOUS LEGACY

Aurangzeb was the last capable Mogul emperor. After his death in AD 1707, the Mogul Empire began to crumble. There was a great struggle among his successors to ascend to the throne helped by power-hungry courtiers during 1707 and 1720. Shahu – the grandson of Shivaji, who was in the custody of Aurangzeb- was released in 1707 and was restored to the throne of Swarajya and was coroneted in January 1708. He adroitly pieced together his kingdom lying in ruins for over two decades since Shivaji's death, incarceration of his brave father Sambhaji and exile of his sagacious uncle Rajaram. He had to foil the designs of Tarabai, Rajaram's wife, who claimed the throne for her son, Sambhaji. King Shahu was a great judge of men and had a knack for collecting competent and capable lieutenants around him. One of the subordinates whom he picked for his astute handling of men and materials was Balaji Vishwanath Bhat, a Kokanastha Brahmin, who rapidly rose to the position of Shahu's Prime Minister, called Peshwa.

Balaji's forefathers were hereditary Deshmukhs (Revenue Collectors) of Mahal Danda Rajpuri and Adhikari of Shrivardhan in Janjira State. His friendship with Angre brought him in conflict with Sidi of Janjira. He left his homeland to seek greener pastures in plains and settled in Saswad near Pune. After Shivaji's death, collection of revenue had become an arduous task which required a strange synthesis of knowledge, intrigue and ability to fight. Balaji possessed that heady mix of brain and brawn. In 1702, he defended Singarh under Dhanaji Jadhav, the Maratha army chief. In 1704 to 07, he worked as Sarsubhedar (Collector)

of Prant Daulatabad, where he made contact with Shahu , who was then in captivity. In 1707, Balaji rose to the post of Diwan of Senapati (Army Chief). Dhanaji died in 1708 and was succeeded by Chandrasen Yadav. Soon after the coronation of King Shahu, Balaji became his close confidant and in the recognition of his services, Shahu conferred the title of 'Karte'(Administrator) upon him. Balaji was blessed with two sons, Bajirao and Chimaji, both were to prove themselves as astute and capable Generals of War in times to come.

Balaji soon started having problems with Chandrasen (the Army Chief). Shahu was at his lowest ebb in 1712. Important appointees like Chandrasen Yadav, Sarlashkar, Kanhoji Angre and Zulfikar Khan went against him. However, Balaji stood by him in those hard times, raised the army, defeated Chandrasen, suppressed 'free-booters' like Damaji Thorat who rebelled against Shahu and persuaded Angre to fall in line. Shahu rewarded Balaji by appointing him Peshwa in 1713, a powerful post which combined Prime Ministership of the Kingdom as well as the strategic command of the army. Balaji concluded a treaty with Hussein Ali Sayyid, the Mogul Subhedar of Deccan securing for Shahu the Swarajya, Maratha claims of Chauth (right to collect one fourth of the revenue in the State), and Sardeshmukhi over six subhas (provinces) of Deccan, Mysore, Trichanapally and Tanjore.

The unwilling monarch Farukhsiyar, a puppet in the hands of Hussein Ali Khan and Abdullah Khan, was not willing to ratify the treaty. He summoned the assistance of mighty vassals like Nizam-ul Mulk, Sarbuland Khan and Ajit Singh. Sayyad Hussein then marched on to Delhi accompanied by Maratha army under Balaji, seized the emperor, blinded him, had him changed and got the treaty ratified by the new emperor. Balaji returned back in 1709. These were major diplomatic triumphs solely due to Balaji's intellect and muscle power, which gained the Swarajya firm legitimacy with the Delhi power. Balaji Vishwanath's meteoric rise was at its peak. He had contributed immensely towards restoration of peace and order. "Calm, comprehensive and of commanding intellect, an imaginative and aspiring disposition, aptitude for ruling rude nature by moral force, endowed with diplomatic skills and mastery of finance and threatened more than once by death", as VG Dighe describes him, Balaji Viswanath can be aptly called the architect of the renewed Maratha Swarajya under King Shahu. It was, therefore,

natural that Shahu selected his equally, if not more, capable son Bajirao Ballal to don the mantle of Peshwa after the untimely demise of Balaji on April 2, 1720.

MARSHAL UPBRINGING

Bajirao, whose other name was Vishwasrao, is known as Bajirao I (Bajirao the First)because his grand-son and another successor were also named as Bajirao. Born on August 18, 1700 two decades after the passing away of Shivaji the Great, Bajirao along with his younger brother Chimaji was brought up under their father's strict discipline. The early childhood spent together with their father in arduous and unstable milieu welded the siblings in a strong bond. Chimaji, as gallant and doughty as his elder brother and his moral counsellor, remained his loyal lieutenant through the thick and thin and never claimed a separate identity for himself, ever contented to stay in his illustrious brother's shadow. Indeed theirs is a rare instance of fusion in those times of sibling rivalry for power.

Bajirao dedicated himself to the military profession from an early age. As a child, he was a close witness of his father's triumphs over Senapati Chandrasen and other minor rebels and also kept him company when he was imprisoned by Damaji Thorat and subsisted on parched rice and gur for days. He learned subtle details of home and foreign policy from his father. He became adept in the art of warfare and was an extra-ordinary horseman. During the epic march of Balaji Vishwanath to Delhi and back in 1708-09, Bajirao had a ring-side view of the history in making. It gave him an insight in dealing with the Central Power.

Bajirao was resented by the elite around King Shahu – Shripatrao Pratinidhi, Anandrao Samant, Naroram Mantri, Khanderao Dabhade, Kanhoji Bhosale and others. He developed his own band of followers – Chimaji Appa, a pillar of strength behind him, Ambajipant Purandare, Pilaji Jadhav and Fatehsing Bhosale. Bajirao discovered military talents like Udaji Pawar, Malharrao Holkar and Ranoji Shinde and matured them from the scratch into valiant generals of war to become the founders of the famous Pawar, Holkar and Scindia dynasties.

ANOINTMENT AS PESHWA

After the untimely demise of Balaji Vishwanath, King Shahu had no hesitation and lost no time in anointing Balaji's young son, who

had not yet entered into his twenties, as his successor much against the advice of his coterie that Bajirao was not yet fit for donning the heavy mandate of Prime Minister. As a matter of fact, his meteoric rise to this highest position earned him instant enemies in Shahu's court, senior functionaries like Shripatrao Pratinidhi, anandrao Sumant, Naroram Mantri, Khanderao Dabhade and Kanhoji Bhosale. Bajirao assumed the charge of Prime Minister on 17 April 1720. As per historical records, he was granted "11000 'Hons' as pay, royal residence, revenue of 18 townships and an allowance of Rs 30,00,000 for maintenance of his army".

Bajirao got on with the many challenges waiting for him without any respite or celebration of his Peshwaship. A portion of Swarajya was in the hands of Mogul sardars like Siddi. Shahu's sibling Sambhaji Raje of Kolhapur - Tarabai's son- who was given part of the Kingdom, was not prepared to accept Shahu's supremacy and was being instigated by Nizam and other self-seeking Maratha sardars to rebel against Shahu. The Badshah was retracting from his grant of revenue rights for Malwa and Gujarat Provinces to Marathas. There was an urgent need to consolidate the treaties entered by his father on behalf of Shahu in the recent past. On the whole, there was a dire need to take the battle into enemy's quarters.

The setting was fraught with challenges, but was pregnant with opportunities. Bajirao handled it with immense offensive spirit and enduring initiative. He decided to head north much to the chagrin of his detractors, who advised Shahu that the raw Bajirao should restrict himself to consolidation of the territory of Swarajya. When confronted, the dashing young Peshwa is learned to have told his benefactor, "Strike, strike at the trunk and the branches will fall off by themselves. Listen to my counsel and I will plant the Maratha banner on the walls of Attock". (Kinkaid and Parasnis). Addressing his detractors, he said, "Let's transcend the borders of Deccan and conquer Central India. The Moguls have become indolent womanisers and opium addicts. The accumulated wealth in the vault of Northern India can be ours. It is time to drive from Bharatvarsha these outcastes and barbarians. Let's throw them back over the Himalayas, back from where they came from. The Maratha flag must fly from Krishna to Indus. Hindustan is ours." Coming from a young, exuberant man of twenty, these are inspiring words for generations to

come. The King gladly handed over an open cheque to Bajirao to plan campaigns, as he pleased, to realise his dream. And strike, Bajirao did!

During the short span of next twenty years, he defeated the mighty Nizam decisively at Palkhed and Bhopal, taught a lesson to his intransigent Army Chief, Khanderao Dabhade by routing him in the battle from of Dabhoi, regained the Maratha territory forcibly occupied by Siddi, defeated the Portuguese, not only took the Maratha power across the Narmada by invading Malwa, Gujrat and Bundelkhand but also knocked on the ramparts of Delhi. When he took over in 1720, Maratha Kingdom was embroiled in internecine feud, threatened by Nizam and other inimical powers. At the time of his untimely death in 1740, he left behind a Maratha empire. He could achieve this stupendous target through his remarkable military acumen, eminent leadership, dexterous strategy and extra-ordinary personal bravery.

MILITARY CAREER

The territory of Swarajya handed over to Shahu on his release from Aurangzeb's captivity comprised a thin strip of land adjoining the sea from Surat to Karwar and a portion of land to the east of Sahyadri. (Map No 1) Part of this territory was in the hands of the Portuguese, English and Siddi. This was the state of the Western Coast in 1920 when Bajirao took over. During the course of next twenty years Bajirao captured territory up to Shrirangpattanam in Karnataka, Gujarat, Madhya Pradesh, eastern portion of Rajasthan, Haryana, Delhi, Uttar Pradesh Bundelkhand, southern part of Yamuna and the southern part of Bihar including Chhota Nagpur. (Map No 2). Bajirao's gallant march from Swarajya to Samrajya (Empire) can be gauged from this transformation achieved by 1940. A bird's eye view of his ceaseless campaigns is taken below.

Immediately after Bajirao's assumption of the coveted appointment of Peshwa on April 17, 1720, Nizam headed south in May on the orders of the Emperor, crossed Narmada and defeated Dilawar Khan, sent by Sayyad brothers to checkmate Nizam, in the battle of Khandwa. Alam Ali, nephew of Sayyad brothers, was then Subhedar of the South appointed by the emperor. Knowing that the axe will now fall on Alam Ali, Shahu sent Bajirao to the aid of the nephew of his benefactors. However, Nizam defeated Alam Ali in the battle of Balapur on July, 31, 1720. The young

(Map No 1)

Peshwa had an occasion to witness the prowess of the mighty artillery of Moguls. It was at this battle that Nizam came face to face with Bajirao, realised the worth of his future prime adversary and was deeply impressed by his persona. Strangely, there was to develop in future a lifelong race of supremacy between the young Peshwa and the seasoned veteran. They met twice on the battlefield and the mighty Nizam was defeated squarely on both occasions by the sprightly Peshwa.

Bajirao's first meeting with Nizam took place on the latter's suggestion on January, 1721 at Chikhalthana. Though nothing much came out of this meeting, both had an opportunity to assess and size up each other. Soon thereafter, Bajirao set off to collect the Chouth in Khandesh and Malwa. Nizam was appointed as Vazir (Prime Minister) by the Badshah in October 1721. Bajirao met Nizam on February 23, 1722 at Bolasha on Malwa- Gujarat border. Nizam left Delhi in 1723 and moved to south, an act viewed as a rebellion by the Emperor, who issued secret orders for his neutralisation. Nizam asked for Bajirao's help. They had a third meeting on May 18, 1724. Badshah sent Mubarizkhan with a huge army to defeat the Nizam. They fought at Shakkarkhera (80 miles from

Maharashtra West Coast - 1820

Gujarat

Ujjain   Bhopal
Indur

VINDHYA RANGES   River Narmada

Baroda
River Tapi

SATPUDARANGES

Bharuch

Achalapur

Burhanpur

Surat

KHANDESH

Daman

Devnagri (Daulatabad)

Dahanu
Tarapur

Aurangabad   River Godavari

Vasai
Kalyan

Mumbai   Jannar   Ahmednagar

K
O   Pune

Chaul   K   Raigad   Bidar

Janjira   A   Satara

N   Chiplun   Gulbarga   Hydrabad

Bijapur   River Krishna

Malvan
Vengurla

Goa   River Tungabhadra   Vijaynagar

(Map No 2)   Karwar   0 25 50 75 100
Anjediva   Miles

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Aurangabad). Bajirao rendered valuable help to Nizam to win the battle. This experience in a major battle as an ally came of great help to Bajirao when he went to war with Nizam later. On his victory, Nizam was appointed as the Subhedar of Deccan, the very reason for which he had fallen out with the Emperor. Soon thereafter, Nizam moved his capital from Aurangabad to Hyderabad.

During 1725-27, Bajirao undertook two successful campaigns to capture selected territory in Karnataka, Andhra, Tamilnadu and Kerala. It was during the second outing that news came of Nizam's intention to overthrow Shahu and install his cousin, Sambhaji in his place. Bajirao was recalled urgently from south in March 1727. He planned a campaign to defeat Nizam and set out with his army in August 1727. In a brilliant battle of movement which lasted for five months, Bajirao decisively defeated Nizam at Palkhed in February 1728. This epic battle will be analysed in detail subsequently.

In 1728, the armies of Scindia, Holkar and Pawar under the leadership of Chimaji attacked Malwa and won the battle of Ajmera on November

29, 1728. Giridhar and Daya Bahadur, two valiant Mogul sardars, were killed. Ujjain was cordoned, however, the Marathas were not successful in capturing the town. While this was in progress, the powerful Subhedar of Allahabad, Mohd Bangash Khan attacked Bundelkhand. Raja Chhatrasal sought refuge in Jaitpur fort and begged for Bajirao's help. Bajirao strode rapidly through the formidable mountain ranges of Satpura and Vindhya with his army, captured Mandavgarh enroute and reached Bundelkhand via Jabalpur. His lieutenant Pilaji Jadhav had in the mean time placed an effective cordon around Bangash's army. Bangash entered the fort. It was lifted only in March 1729 after Bangash surrendered. Raja Chhatrasal made Bajirao as joint owner of his kingdom along with his sons.

In December 1730, Mohd Bangash and Nizam instigated Maratha Army Chief Trimbakrao Dabhade and offered covert help to liquidate Bajirao. Much against his wishes, Bajirao fought another brilliant duel to defeat Dabhade at Dabhoi on April 1, 1731. Trimbakrao Dabhade was killed in the battle. Back home at Pune, Bajirao courageously faced Dabhade's antagonised and unforgiving mother offering himself in place of her lost son. In 1733-34, he undertook two campaigns to capture the sea-fort of Janjira.

In November 1734, the Badshah sent two of his most trusted and powerful generals, Khan Dauran and Vazir Kamaruddin to Bundelkhand and Malwa respectively. Their plan was to sandwich Bajirao' army in between and destroy it. Under Bajirao's dynamic leadership, Pilaji Jadhav's small band checkmated Kamaruddin's huge army. 20000 horses of Malharrao Holkar and Ranoji Shinde together faced Khan Dauran's army of 200,000. The Mogul Army was defeated in detail. Khan Dauran sought a treaty at Kota on March 22, 1735.

Bajirao left Pune for Udaipur on October 8, 1735. He visited the Rajas of Udaipur, Mewar and Jodhpur. He was expecting that the Emperor will meet few of his demands and was to visit Delhi on that account. However, having learnt at Jodhpur that the Emperor was unlikely to accede to his demands, Bajirao returned to Pune in June 1736. On September 25, Siddi came around and signed a treaty. Just then he learnt that the Badshah had appointed Nizam's son as Subhedar of Malwa, an honour which Bajirao deserved. This injustice infuriated Bajirao and he decided to strike Delhi. He

left Pune with his army on October 26, 1736 and was joined at

Nadurbar by Holkar and Shinde with their armies. Badah despatched Sadat Khan with a huge army but he could not cross Yamuna River. Holkar, however, managed to get across and while pursuing Sadat's Advance Guard, happened to mistakenly attack his main body on March 12, 1737, suffered heavily and retracted. This led Sadat Khan to presume that Bajirao had gone back. Sadat Khan informed the Emperor accordingly. The three Mogul stalwarts- Bangash, Sadat and Dauran assembled in Agra and were busy in wild celebrations, oblivious of Bajirao's rapid turning move towards Delhi.

Making best out of the reverse suffered by Malharrao Holkar, Bajirao sent a body of some non-combatants (Bunage) towards Bundelkhand as a ruse to suggest that he was bound southwards, but circuited Agra and rode rapidly with his cavalry towards Delhi. Covering a distance of 40 miles per day, he reached Kushbandi outside Delhi's perimeter on March 28. This was a shock to the Badshah. He sent a body of troops which was slaughtered by Marathas. Bajirao had laid a siege and with his entire forces away in Agra the Emperor was totally isolated and in a perilous situation. Bajirao could ransack Delhi, but he had no such plans. Having proved his point, he headed for Pune and reached there on July 6, 1737.

In the meantime Nizam headed towards the north and reached Delhi on June 22, 1737. Badshah accorded him a grand welcome. Mogul army of 200000 was placed under the command of Nizam and along with armies of other sardars, he was asked to undertake a campaign to defeat Bajirao. Nizam asked his son Nasirjang to march north with his own army of 80,000 located in Hyderabad, which he had left behind and prevent Bajirao from crossing the Narmada. On learning about Nizam's intentions, Bajirao headed rapidly towards north with his army and confronted Nizam at the battle of Bhopal, fought on December 16-17, 1937, which Bajirao won convincingly. Nizam signed a treaty on January 7, 1938. The Battle of Bhopal is another example of Bajirao's brilliant generalship.

The last major endeavour of Bajirao's military career was the Battle of Vasai with the Portuguese fought under Chimaji's leadership. General Loui Botelho, nephew of the Viceroy of Goa,was the commander of Vasai Garrison. He was delay dallying the return of a portion of Sashti Island, which was to be handed over to the Marathas in accordance with

an earlier treaty. When reminded about it, Botelho demonised Bajirao as 'Negro', an epithet a person of much fairer complexion than Botelho himself hardly deserved. Chimaji proceeded towards Sashti on November 26, 1738. Another contingent under Shankar Phadke and Vyankatrao Joshi was sent to throttle any reinforcement coming from the direction of Goa. After capturing Mahim and Tarapur, a force comprising 2500 cavalry and 4000 infantry, reached Vasai in February 1739. A massive assault was launched on the sea fort. Botelho surrendered on May 5. The magnanimous Chimaji not only allowed the entire Portuguese garrison with women and children to leave the besieged fort but also ensured their safety till they reached Goa.

Bajirao fought his last battle at Waluj near Aurangabad with Nasirjang, Nizam's son, and defeated him squarely. He earned the provinces of Khargaon and Handia. While he was on an inspection visit to Khargaon, he died at Rawer on April 28, 1740. This marked an abrupt end of an unbelievable and charismatic military career of an outstanding general of war, who never ever tasted defeat in his short but eventful military career.

A fascinating case in point, the battle of Palkhed, is discussed below to get a glimpse of Bajirao's extraordinary generalship.

BATTLE OF PALKHED

After Nizam shifted his capital to Hyderabad, he befriended Shahu's influential minister Pantprtinidhi in Bajirao's absence and got his taxes in respect of Hyderabad condoned by offering Pantpratinidhi a jagir in Berar. Bajirao did not approve of this concession, however did not want to precipitate the matter since Shahu was generally inclined to favour Nizam. As a matter of fact, Nizam was using various means to tarnish Bajirao's image in the eyes of Shahu.

While Bajirao was away on the Karnataka campaign, Shahu learnt that the armies of his cousin Sambhaji and Nizam were approaching Satara, Shahu's capital. Shahu's staunch enemy Udaji Pawar soon reached Rahimatpur near Satara. Nizam announced that he would decide who had a better claim to the throne of Maratha Kingdom only after deliberations with the opposing parties, Shahu and Sambhaji, a blatantly mischievous act. Shahu instantly sent a word to Bajirao and Sarlashkar Purandare to turn back from Karnataka. A decision to neutralise Nizam

was taken and the planning commenced in mid- August 1727.

- **Nizam's Credentials**: Nizam –ul Mulk was a capable Turani general; an experienced strategist, devious fighter and a brave soldier. He was ostensibly the most powerful Mogul sardar of the Eighteenth Century. Born on August 11, 1671, he was elder to Bajirao by 29 years. His father Kulich Khan was in the service of Aurangzeb. Emperor Farukhsiyar had awarded him the title 'Nizam ul-Mulk' in appreciation of his services for the Mogul Empire. He was appointed as the Subhedar of six provinces of Deccan. Barring Turkaj Khan and Aivaj Khan, all other sardars of Nizam were Marathas. Raorambha Nimbalkar, Chandrasen Jadhav, Kanhoji Bhoasale, Senasaheb Subha, Sarlashkar Sultanji Nimbalkar were all experienced and valiant fighters and had turned against the Swarajya for one reason or the other.

- **Opposing Forces**: Mogul Army was primarily a mercenary force. It comprised large infantry and artillery contingents. The humongous artillery was their winning arm. Paid well and used to luxury and comfort, the Mugal Army always had a long administrative tail of variety of beasts of burden carrying food and other necessities. They moved at snail's pace and lacked mobility. As against strength of 75000-80000 of the Mogul army, Maratha men numbered between 25000 and 30000, mainly of cavalry. While lack of artillery was their major short coming, its absence actually made them lighter. As a result, mobility and flexibility became battle winning assets of the Marathas. Bajirao fought the enemy at a place and time of his choosing. The enemy always feared at what time and from which direction the hurricane of the horsemen personally led by Bajirao will descend on them. Bajirao believed in using his uncanny judgement of the ground and accurate time and space as force multipliers to neutralise enemy's superiority of numbers and artillery. He was a master of the strategy of indirect warfare. He used surprise and deception artfully to the same finesse in plains as Shivaji employed it in mountains.

- **Elements of Strategy:** Bajirao's strategy to seek Nizam's surrender had two aspects. First was to force Nizam to pursue him over long distances so as to tire out this slow moving force completely before seeking the final battle at a time and place of Bajirao's choosing. Second was to ensure the security of his own territory and personal

security of King Shahu, while he played ducks and drakes with the Nizam. Bajirao undertook the responsibility of carrying out the manoeuvre on his own shoulders and left the task of ensuring security of the territory and of Shahu to Chimaji. For this purpose he moved Shahu and his paraphernalia to Purandar Fort and asked Chiamaji to ensure protection of key vulnerable areas of Junnar, Pedgaon, Patas and Khed.
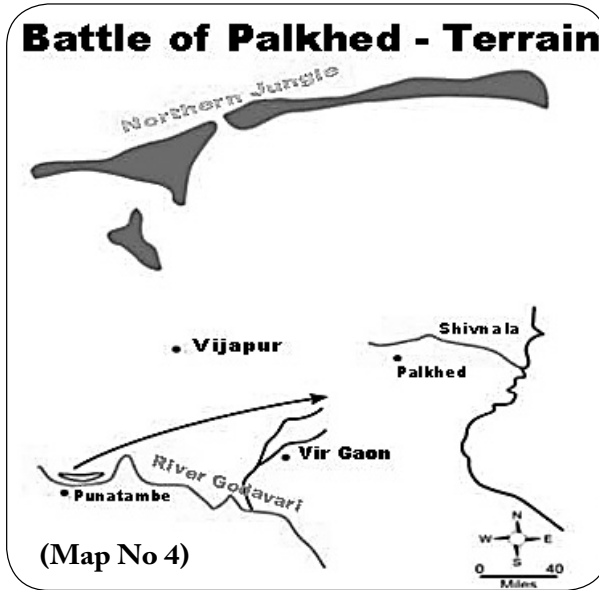
- **Pre-battle Movements**: Nizam's army had camped in general area Dharur- Bhir in July-August 1927. (Map No 3) He commenced his move from Bhir to Satara in October 1727. Bajirao was waiting

Battle of Palkhed: Pre Battle Moves (Map No 3)
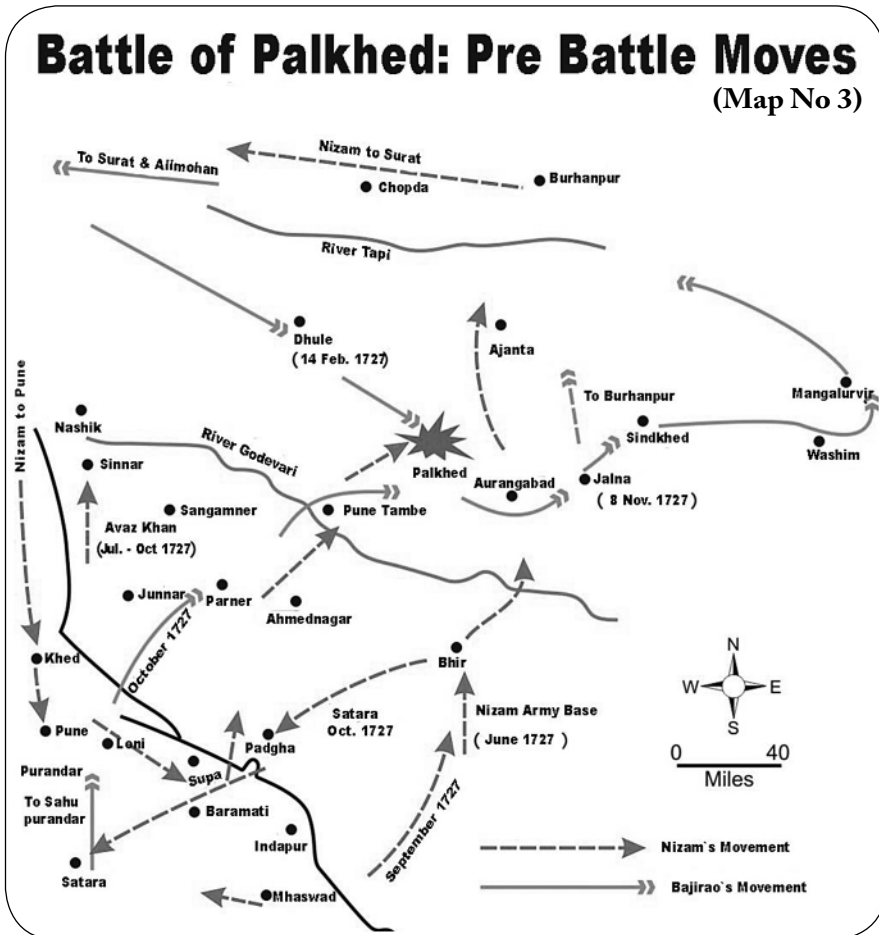
for Nizam to shift base. Immediately after getting the news of Nizam's move, Bajirao moved out with a small band of horsemen towards Aurangabad, then to Parner and leaving Ahmednagar to his right, reached Puntambe. He crossed Godavari River, wheeled right and attacked Jalna town in Nizam's territory. He then showed a diversionary move towards Burhanpur, mainly as a ruse but actually reached Washim by the beginning of December 1727 and collected the Chouth. When Nizam heard that Bajirao was heading towards Burhanpur, a major commercial centre in his reign, he was shaken and turned his entire force and commenced his march towards Burhanpur. This was precisely what Bajirao had wanted. He left Washim and taking the Mangrul- Mahur route, wheeled northwest, crossed Tapi River at Chopda and reached Kakarmuda on December 18. He then crossed the Narmada at Babapir Gandod and turned towards Bhadoch. Having learnt about this move, Nizam also started marching towards Bhadoch to intercept Bajirao. But when he came to know that Bajirao had reached Chhota Nagpur in Gujarat, he was forced to turn back due to his lifelong enmity with the Subhedar of Gujarat, Sarbuland Khan, whose territory Nizam did not want to enter. Bajirao had factored this fact in his plan. Nizam then decided to turn back and attack Pune to force Bajirao to recoil. Nizam's elephantine army thus started moving towards Pune. He captured Junnar, Udapur, Narayangarh,Ouseri and reached Pune. For Bajirao, these were empty spaces and he was quite happy to see Nizam wasting his combat potential. Nizam reached Pune in his own time. Sambhaji's (second) marriage ceremony was held there on January 8, 1728 with great pomp and show. All this while, Nizam thought that Bajirao will rush towards Pune but Bajirao had full faith in Chimaji to shoulder his mandate and ruefully for Nizam, Pune was never on Bajirao's menu. After hearing about Nizam's attack on Pune, Bajirao turned his thrust towards Nizam's erstwhile capital, Aurangabad and entered Khandesh. He reached Belwad near Dhulia on February 14, 1728. On learning about Bajirao's 'Tit for Tat' move towards Aurangabad, Nizam panicked and left Pune. He reached Ahmednagar on February 12. Bajirao arrived in the area of Palkhed, his chosen battleground and waited for the arrival of Nizam. The stage was now set for the final battle. The prey was moving into the

trap.

- **Terrain:** Palkhed is located at 1600 feet above the mean sea level. (Map No 4) Godavari River flows at a distance of 15 miles to its southwest. Only crossing place available at that time on the river was at Puntambe. Shiv Nullah was the only water source in the vicinity of Palkhed, which flew to its southeast and east. The terrain gradually rose towards north. There was a thick forest at a distance of 25 miles to the north. The ground with obstacles on all sides was ideal for Bajirao's proposed cordon.

Battle of Palkhed - Terrain

(Map No 4)

- **Plan:** There were three major elements of Bajirao's operational plan. He was certain that Nizam's unwieldy army will require a period of minimum three days to cross the Narmada; on the first day only the advance detachments with recce elements were likely to cross, crossing of the main body including Nizam's zanana and initial logistic elements was likely to occupy the second day. Therefore, the artillery as well as the heavy logistic elements could commence crossing only on the third day. Bajirao's main purpose was to separate the artillery from the main body and make the fire support ineffective. Lack of artillery was the weakest point of the Marathas. If the fire support was not available to the Mogul army, it would take the wind out of their sails. Bajirao therefore planned that once the main body crossed the river, his commando cavalry detachment would seal the only crossing

place available, at Puntambe and make it impossible for not only the heavy artillery and the logistic tail but for anybody to cross the river after the second day. The artillery located at a distance of more than 15 miles would then be unable to support the main body. The second element of the plan was to sever the supply line and starve the Mogul army. While the heavy supplies were not to be permitted to cross the river, the donkey trains carrying loads which would reach on the first and second day were to be attacked by the commando detachments and to be scattered if not destroyed. The third element was to throttle the water supply sources of the enemy. This was to be achieved by making the river 'out of bounds' for the Mogul army and also by denying the meagre water in the Shiv Nallah which had almost dried in February. Once the effective cordon endured for few days and the enemy was starved for want of food and water, Bajirao planned to attack at an opportune time only if the Nizam does not crack under pressure and surrender.

- **The Battle:** By the beginning of the third week of February, Bajirao's army had taken up positions discreetly in the pre-determined places to spring the cordon. (Map No 5) Bajirao's contingent was towards the east, Pilaji Jadhav in the west, Malharrao Holkar to the west and Dawaji Somvanshi in the south. Once

Battle of Palkhed - 27th February 1728
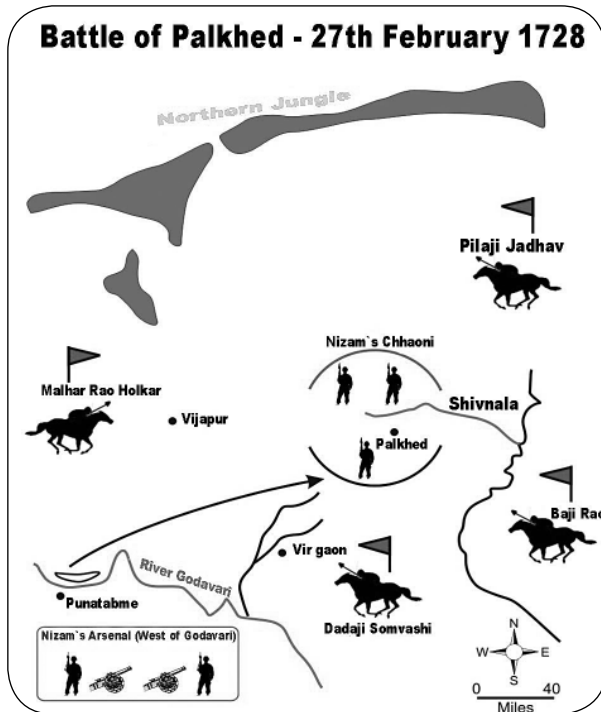
the recce elements, main body, initial supply train and Nizam's Zanana crossed the river, the cordon was sprung. Crossing place at Puntambe was sealed effectively. A whirl wind strike on the supply base after darkness created panic and the donkeys with their loads ran helter-skelter towards the forest in the north. The water sources were denied effectively. Nizam's army starved without water and food. The commando raids continued with increasing intensity and fervour to devastating effect. Strangely, no major fighting took place. The tired and haggard enemy continued to become more and more demoralised with passage of time.

- **Surrender and Treaty:** By the end of February, Nizam started showing signs of accepting defeat. He soon sent two senior sardars, Aiwazkhan and Chandrasen Jadhav, to Bajirao to discuss the terms of surrender. After prolonged discussions, the treaty was signed at Mungi Shevgao on March 6, 1928. The terms of the treaty were entirely dictated by Bajirao. The chouth and Sardeshmukhi rights of the Deccan were to remain with Swarajya, Sambhaji was to return to Kolhapur in a position subservient to his brother Shahu and all territory in the vicinity of Pune captured by Nizam was to be restored to Marathas.

Brilliant Generalship

Napolean has said, "In the art of war, as in mechanics, velocity is the grand element between weight and force". Mobility is the soul of offensive action. Bajirao possessed and demonstrated immense mobility both of mind and action. He despised slow moving infantry, unwieldy artillery, humongous logistic chain with long columns of elephants and donkeys, the Zanana caravans and scores of non-combatants. Motivated cavalryman who trusted nothing but his sword, surviving on rations carried on his back and living off the land, rode incessantly and fell on the enemy from an unexpected direction with suddenness of a lightening was Bajirao's battle winner and was led with rare fervour and zeal. Cavalry is eminently suitable for a decisive result through mobile action. Changez Khan conquered the world through cavalry assaults, Napolean was its proponent, Bajirao matched the dexterity of their horsemanship.

The combination of offensive action, initiative and surprise can unbalance a determined enemy. Every plan of Bajirao rested firmly on this

triad. He seized the initiative early and maintained it throughout each operation. The battles of Dabhoi and Bhopal are cases in point. Bajirao brought a major transformation in the technique of contemporary war. He employed the cavalry not only for raids but for attacking the infantry, defeating enemy's cavalry, launching assaults on guns to debilitate them and placing effective cordon around the enemy 'through which even a fly could not pass'. He utilised the multiple effect of infantry's proverbial fear of the cavalry, the magic of the horseman's sword striking from height and the likelihood of the infantryman being crushed under the galloping horse to a disastrous effect to destroy the Mogul infantry moving at snail's pace.

Ground, relative strength and time and space are the prime factors in war. Any general who can analyse them succinctly and can 'shape the battlefield' to his advantage ultimately wins the battle. Bajirao had an uncanny ability to select the ground of his advantage. He carefully chose a killing ground surrounded by natural obstacles and deftly channelized the enemy inside. He employed a variety of gimmicks to ensure that his adversary could not bring to bear the full power of his force by splitting it at the crucial hour, thereby neutralising own inadequacy in relative strength. The separation of Nizam's artillery from the main body in Palkhed is an apt case in point. Again, ensuring that Nasirjang's reinforcements did not fetch in time to Bhopal was another instance. Choice of time was of great essence to Bajirao and he fought every battle at the time of his own choosing.

Bajirao made optimum use of resources available with him and never looked over his shoulder. He always fought with whatever he had and achieved, in Liddell Hart's words, 'Mostest with the Leastest". At the time of the Bundelkhand campaign, most of his army was engaged in Malwa under Chimaji. He, however, did not wait, rushed with the available force and defeated a powerful adversary like Bangash. When he was called by the Badshah to Delhi to face Nadirshah, he left Pune without waiting for additional forces and without any loss of time.

Bajirao's tactics were unconventional and original. His 'Cordon Technique' was well evolved and most effective. His plan was invariably based on throttling enemy's reinforcements, food and water supplies and starving both his men and animals. He always chose eminently suitable sites for application of his cordons. So effective were the cordons that 'even

a butterfly could not enter it' and the enemy always came on his knees and surrendered. He earned victory without even shedding a drop of blood. He also employed the strategy of tactical withdrawal to his advantage. He used it effectively in the Battle of Dabhoi. He feigned to withdraw and when Dabhade fell to his ruse and left his tactically sound position, Bajirao recoiled and hit him hard to defeat him decisively.

A valiant and born leader, Bajirao was well built, very handsome and made an instant impression on friends and foes alike. He had a commanding stature 'which all but reached the low ceiling of the royal palace', rich and clear voice, bold virile features, dark imperious eyes that forced attention and above all, the rare felicity of diction that for centuries has been peculiar gift of Chitpawan Brahmins, which produced irresistible effect. He was a soldiers' general, rode and fought better than any of his followers, was a non-vegetarian against the custom of his caste and campaigned without a respite. He symbolised a horseman who ate on the back of the horse, rode relentlessly and had frugal administrative requirements, unlike his Mogul adversaries. He was romantically connected with Mastani. Claimed to be the daughter of Raja Chhatrasal, she was endowed with unparalleled beauty, 'fair as is the rose in May', in Chaucer's words. The Bajirao-Mastani romance is what the fables are made of. Unfortunately, it has totally shadowed for posterity the true recognition of outstanding military prowess and strategic genius of Bajirao Peshwa.

Bajirao inculcated a feeling of superiority, invincibility and 'Espirit-de-corps' in his soldiers. They went into battle certain in their minds that they cannot lose when Bajirao led them from the front. He taught them to regard the enemy as an inferior. He convinced them that not the guns, not the armaments, not the numbers and not the ample supplies that win the battle, but it is the Maratha soldier on the back of his horse with full confidence in his sword and spear and with the speed of lightening that will rout the enemy. Bajirao was truly a military genius and a master of mobile warfare.

Major General Shashikant Pitre (Retd)
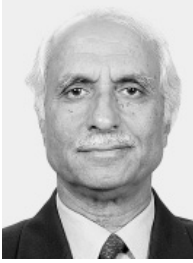
Maj Gen Shashikant Pitre, a post graduate in Military Science and a Master of Engineering took part in 1965 and 1971 wars and in the IPKF in Sri Lanka during 1987- 90. He commanded an infantry brigade on the Sikkim border and in the insurgency infested area of Manipur and an infantry division on the Western Border.

After retirement, he has written widely in Marathi dailies on military matters and has to his credit about 350 articles published in the print media. His book on the Kashmir Imbroglio, titled "Domel Te Kargil" in Marathi was adjudged as the best book of 2001 by Maharashtra Sahitya Parishad, a prime literary forum. He has authored a book each on the Sri Lanka Conflict and on the Indo-China War of 1962. Other publications are a biography of Admiral B S Soman, both in Marathi and English, a biography of Lt Gen SPP Thorat.

General Pitre is the founder chairman of an ex-servicemen organization HORIZON dedicated to humanitarian demining, i.e. finding and destroying land mines. It has recovered over 1,00,000 landmines and rendered safe an area measuring over 1000 sq kms for rehabilitation.

Climate change & Implcations for National Security

Dr Amitav Mallik

1. Introduction

The concerns of global warming has finally caught the imagination of the people world over, with the Nobel committee recognising the cause to be important enough to deserve the peace prize in 2007. Modern society has caused significant changes in the global eco-system balance and set-in a process that can pose grave threat to human security in future. The shifts in climate can be attributed to a variety of factors that include orbital variations, solar fluctuations, volcanic activity, and the atmosphere's concentration of greenhouse gases, such as carbon dioxide, methane, and water vapour. Balance in the earth's ecosystem has been maintained by virtue of planet's own natural greenhouse effect - trapping heat in the atmosphere to balance cooling of the earth. However the changes observed today are occurring at a more rapid rate than is explainable by known natural cycles. The nature's balance is getting affected by human activity on a scale that is too fast for the nature to compensate and recover, posing a possible run-away danger of global dimension.

Climate change is a slow phenomena that has not attracted the kind of attention accorded to the threat of weapons of mass destruction (WMD) or the asymmetric threat of terrorism. However, cumulative consequences of undesired climate changes could be more devastating than the clear and visible dangers of the present time. Effects of climate change can increase the stress among societies and combined with fierce

competition for scarce resources, conditions can lead to unprecedented tensions and dangers to stability and security of modern societies. Since these processes, beyond a point, cannot be stopped or reversed by human will, the effects of climate change could easily snowball into dangers of global dimensions. The linkages between economic security, resource availability and climate change are complex but quite substantive. However, since these are not so apparent in the immediate context, the implication of climate change to national security has been often under-estimated. This certainly deserves much more attention in the future.

Based on the existing data and the recent reports of the IPCC (Inter-governmental Panel on Climate Change) it appears clear that the effects of climate changes in the next few decades could pose serious threat to global peace and security. The predicted effects of climate change over the coming decades include extreme weather events, frequent droughts and flooding, retreating glaciers, sea level rise, loss of agricultural land, habitat shifts and the potential of increasing spread of life-threatening diseases. In the national and international security context, climate change threatens to add new hostile and stressing factors and it has the potential to create frequent natural disasters on a scale far beyond what is seen in the past. The consequences could very likely create political instability where societal demands exceed the resource availability and create situations beyond the capacity of local governments to cope. Given the nature of the modern globalised world that is more interdependent and more aware than ever before, the scarcity and in-equitable access to basic resources like water, food and shelter will be a recipe for escalating tensions and chaos, that can pose a distinct threat to stability and security at all levels – societal, national as well as international.

Unlike most traditional national security threats where the threat is perceived from an identifiable enemy acting in threatening ways over a specific timeframe, climate change has the potential to result in less visible but more complex situations where interdependent conditions, occurring locally or globally within the same time frame, that could pose serious threat to national stability and global security. The consequences could further erode the economic and environmental conditions as food production declines, clean water becomes increasingly scarce, diseases increase and large populations begin to migrate in search of livelihood and safety. Besides causing stress and conflict between nations, such situations

can easily lead to increase in internal conflicts, fractured societies and act as incubator of civil strife, genocide and growth of extremism and terrorism. Climate change can thus act as threat multipliers for instability, particularly in the volatile regions of the world and seriously exacerbate already marginal living standards in many developing nations.

Climate change presents a new and very different type of national security challenge. As the global warming causes the average temperatures to rise, different regions would face varying impacts of temperature changes and combined with the 'fear of the unknown' in the future, this will likely create extreme tensions between nations and regions. It is the impact of the temperature increase on natural systems, including habitats, precipitation patterns, extreme weather events, ice cover, sea level etc, which will have serious implications for national security. Human civilizations have grown and flourished over the last five millennia, mainly because the world's climate has been relatively stable. But the Global surface temperature has increased by 0.8° C since the beginning of the 19th century and studies suggest that the earth is getting warmer now at a faster rate than it has ever been in past 5000 years**.** If climate changes significantly and environmental conditions deteriorate to irreversible levels, societies can become highly stressed, human security can be seriously compromised, regional tensions could rapidly escalate and nations or even regions could become unstable, leading to international conflicts and possible war situations.

Moving beyond the arguments of cause and effect, it is important that world over, security analysts join the environmentalists and begin to address these potentially devastating effects of climate change on national security. The increasing risks from runaway climate change needs to be addressed immediately because they will almost certainly get worse if we delay. Climate change, energy security and national security are a related set of global challenges and because the issues are closely linked, solutions to one affect the other. Technologies already exist today to support the economic and security needs of nations, what is needed is the foresight to balance today's needs with the ecological imperatives of tomorrow. The potential consequences of climate change are so significant that the prudent course of action would be to begin early to assess how the indicative trends in climate changes may potentially affect national security, and what actions could be initiated

by security planners and policy makers to prevent such threats. In the context of national security, stability is an important pre-condition to comprehensive security. Maintaining stability within and among nations is often the primary means of avoiding full-scale wars.

In terms of National security threat perceptions that could be influenced by Climate Change, the important questions that need to be addressed may be summarised as follows:

1. What are the effects of climate change – regionally and globally that are likely to represent security risks to individual nations as well as to global peace and stability?
2. For a nation like India, from a geo-strategic point of view, what are the ways in which these conditions may impact the national security interests?
3. What are the areas of conflict with other nations that climate change can exacerbate and what are the areas where that demand international cooperation?
4. What actions should the nation take to address the national security consequences of climate changes within the country and
5. What are the areas where the climate changes are unavoidable and how the nation must accept and adapt to these changes for continuing on the path of sustainable development?

The paper discusses these issues and bring focus on the actions necessary to protect the national security interests for India, in the context of problems due to climate change. The global complexities of the problem of the problem will also require a multilateral approach to meet the growing challenge and India must also plan a proactive role for that.

2. Geo Strategic Implications of Climate Change

The future effects of climate change will stem from de-stabilising processes involving sudden or even catastrophic environmental changes. It is possible that the effects will be felt more rapidly and widely than anticipated, leading, for example, to an unexpected increase in extreme weather events challenging the collective and individual capacity to respond. The stresses that climate change will put on our national security will be different than any that one has dealt with in the past. Unlike the security challenges that we are used to dealing with, the effects of

climate change will manifest very slowly, very silently but very certainly, and they will affect every nation, simultaneously but perhaps with varying degrees. While the developed world will be far better equipped to deal with the effects of climate change, some of the poorest regions may be affected most. Climate change may thus aggravate the economic divide between societies/nations and contribute to conditions that can fuel extremist ideologies and anti-rich sentiments. Many developing countries do not have the strong government and social infrastructure to cope with the types of stresses that could be brought on by global climate change and when a government can no longer deliver services to its people, ensure domestic order, and protect the nation's borders from enemies, conditions are ripe for turmoil, extremism and terrorism to fill the vacuum. This is one major effect of climate change that has now caught the imagination of the western developed nations, while in fact it is the poorer developing nations that will fall pray to such conditions first and face grave threats to their national security. Such stresses can not only lower the threshold of conflict but also threaten the fight to end poverty in developing countries.

India has been predominantly agriculture based economy where the health of the monsoon season determines the economic trends and even political stability. Water issues are very important, because adequate supplies of water for drinking, irrigation, and sanitation are the basic prerequisite for human habitation. Changes in rainfall, snowfall, snowmelt and glacial melt have significant effects on fresh water supplies, and climate change is likely to seriously jeopardise all of those factors. A modest rise in temperature of about 2°C in mountainous regions can dramatically alter the precipitation mix by increasing the share falling as rain while decreasing the share falling as snow. The result can cause more flooding during the rainy season, a shrinking snow/ice mass and less snowmelt to feed rivers during the dry season. Over 80 percent of water is used for agriculture in India and reducing snow-melt from mountain glaciers is a serious concern. Major rivers in India originate in the Himalayas and if the massive snow/ice sheet in the Himalayas—the third-largest ice sheet in the world, continues to melt, it will dramatically reduce the water supply to much of Asia. There are predictions by very reputable simulation projects that by 2050, large parts of India and China will be severely water scarce.

Access to vital resources, primarily food and water, can be a major causative factor of conflicts, a number of which are already playing out today in Africa like in Darfur which provides a case study of how existing marginal situations can get acute beyond the tipping point by climate-related factors. It also shows how lack of essential resources threatens not only individuals and their communities but also the region and the international community at large. Crop ecologists estimate that for every 1° C rise in temperature above historical norms, grain production will drop 10 percent. Most of the world's growth in food demand is occurring on the Indian subcontinent and in sub-Saharan Africa, areas already facing food shortages. Over the coming decades, these areas are expected to become hotter and drier as a consequence of global warming.

Land loss and flooding will cause displacement of major populations. About two-thirds of the world's population lives near coastlines where critically important facilities and infrastructure, such as transportation routes, industrial facilities, port facilities, and energy production and distribution facilities are usually located. Any significant rise in mean sea level would mean potential loss of land and displacement of large numbers of people. Rising sea levels will also make coastal areas more vulnerable to flooding and land loss through erosion. Storm surges will take a greater toll on coastal communities and infrastructure as sea levels rise. Most of the important major rivers and river deltas in the world are densely populated along their banks. As sea levels rise and storm surges increase, saline water can contaminate the groundwater, inundate river deltas and valleys, and destroy croplands. This will cause major movement of population to inner land and cities. This represents very much the likely scene for India.

Although climate change may initially force migrations of people due to economic conditions, the larger concern will be movement of asylum seekers and refugees who due to ecological devastation become settlers in other's areas, as any such mass migration will add to global tensions. Over the course of next few decades, sea level rise could potentially cause the displacement of tens of millions of people from low-lying areas such as Bangladesh or Maldives island. These migrations can lead to international political conflict. Already we have large migration from Bangladesh to India due largely to loss of arable land and its affects on

the economy, and political effects in the regions are already a cause of serious concern. .Most climate projections indicate increasing monsoon variability, resulting in increases in both flood and drought intensity in temperate and tropical Asia. Sea level rise, water scarcity affecting agricultural productivity and increased spread of infectious disease are the primary climate induced effects that are expected to cause serious problems in Asia. Climate change is expected to increase the geographic range of infectious diseases such as malaria, dengue fever etc and increase the risk of water-borne disease.

For secure and comfortable life, human societies need access to certain fundamental resources, the most important of which are water, food, shelter and health support. Any lack, or mismanagement of these basic necessities can undercut the stability of local populations and affect regions on a national or international scale. Disputes over basic resources may not automatically trigger violent outcomes but things can change when the situations become more acute. In areas with strong governments and societal cohesiveness environmental concerns being common to all, could in fact foster grater cooperation between regional neighbours. However, if mismanaged, the same situations could lead to increased tensions and conflict. This is what the progressive nations must realise and take proactive steps to create the framework for international cooperation on common dangers such as climate changes. Most astronauts describe how beautiful the earth looks from space with its thin layer of atmosphere that shines against sun light and how utterly vulnerable it appears in the larger scheme of things. The realisation that this protective atmosphere of the earth is getting eroded due to over consumption by the human societies for development and security is frightening. Now with serious security implication becoming more real, it is time for security forces and defence planners to analyse how best the military can be a catalyst for mitigating some of the environmental security threats and thereby strengthen the national and international efforts in controlling climate change related tensions and conflicts.

3. CLIMATE CHANGE AND ENERGY SECURITY

There is compelling evidence to indicate that climate change is occurring and that the atmosphere will continue to warm at an unprecedented

rate throughout the 21st Century. There is scientific consensus that a large part of this warming is attributable to human activities, primarily through the concentration of CO_2 and other greenhouse gases. Change will be intensified and accelerated by the diminution of natural carbon-capture processes (such as forests and marine life) and the reduction of the polar ice-caps. Uncertainty remains as to the precise rate and character of expected changes over the next century, because climate science is complex, with and 'cause and effect' relationships not yet clear. Therefore, the consequences of climate change will vary in their impact in time, incidence and geographical extent. It may be a very unstable and unpredictable process, involving both progressive evolutions and sudden instabilities. Economic growth and increased consumption will result in greater demand and competition for essential resources. Demand for energy is likely to double by 2030 and fossil fuels will have to meet more than 80% of this increase. Hence many environmental scientists fear that the human induced global warming trends may be very difficult to reverse because that will have serious implications for development aspirations as well as energy security considerations of individual nations.

Energy security is about ensuring adequate energy resources and self-sufficiency for the developmental goals as well as for security needs of a nation. India imports over 70 percent of its requirement of oil and as per the World Energy Outlook by IEA, India's energy dependence on oil imports may grow to 91 percent by 2020 with the 'business as usual' model. Energy demand by China and India are expected to rise very sharply in the coming years and large consumption of fossil fuels by the two of the most populous countries is already a major international concern in terms of its impact on global warming and climate change. Since Europe, North America and Japan have already benefited for many years from cheap energy resources and they still use more energy and emit more CO_2 per capita than other parts of the world, one would expect them to lead in reducing the GHG emissions and help others to do so. However, the focus is now more on energy intensive countries like China, Russia and India to reduce their energy intensity to reduce the environmental impact. (Energy intensity is a measure of energy required by an economic system to produce one unit of growth in its GDP).

The famous Stern Report of Oct 2006 on 'Review of the Economics of Climate Change' argues that the world needs to invest 1 percent

of global GDP each year to mitigate the effects of climate change through raising the price of carbon and by investing for improving energy efficiency as well as for harnessing alternative energy resources. If this is not done, the report argues, up to 20 percent of global GDP may be lost eventually because of the damage done by global warming. Quite clearly, 'Energy Security' can no longer be separated from effects of climate change and one must worry about effective global energy management over and above the priorities of individual nations. IEA predicts that the world's total energy usage may increase by more than half the present level over the next 25 years and use of coal for power generation may predominate over other means, thereby causing serious concerns of runaway conditions for of climate change. US has been for decades the world's largest CO2 emitter, but in 2008 China surpassed the US emissions though its per capita emission remains much lower in comparison. Coal being in abundant supply in US, China and India, the tendency to rely more on coal seems unavoidable, but it will be imperative to replace the present 'dirty' technology with clean coal technologies for the future power generators in order not to exacerbate global warming. World today is debating on how much of this cost of shift to new technologies should be supported by the advanced nations that have already secured their energy security through easy access to cheap fossil fuels.

It is expected that the OPEC share of global oil market may grow to over 50 percent and the era of oil-price controlled economy is already in play. It may be interesting to observe that while global warming concerns are major drivers for investments in energy efficiency technologies and for renewable energy technologies, the oil producers, particularly the OPEC countries stand to lose out if that succeeds. Hence OPEC group will be the last to encourage green energy investments and will always try to control the price of oil to keep the oil supply at a competitive rate for slowing down investments towards reducing dependence on oil. It is therefore paradoxical that if there should be a 'high war-risk' environment driving up oil prices, that would actually make alternative energy development more cost-effective, thus contributing to better mitigation of global warming effects. World may therefore witness an interesting play of forces of economic and security priorities balancing each other in the process of managing GHG emission controls.

The importance of renewable energy sources as well as nuclear energy technology needs to be appreciated in the above context, particularly for a country like India which has very poor self-sufficiency in energy and which is also on a path of steep economic progress that will require more and more energy. Priorities for India therefore must include a variety of initiatives to strengthen its energy security and at the same time be mindful about not worsening the global warming scenario. Increasing the strategic reserves of oil, improving the efficiency of present oil usage both in power generation and transportation sector must be clear priorities for immediate action while investments in clean coal technologies and for renewable energy technologies must also increase so as to reduce the dependence on carbon based energy in the long term.

India also needs the political maturity and pragmatism to realise that nuclear energy must be harnessed to a much larger extent in the interest of energy security as well as environmental concerns. India has done well to almost break out of the technology embargo regimes and become an international partner in nuclear energy technology. With technology advances helping to minimise the traditional risks associated with nuclear reactors and with world-wide revival in nuclear energy option, India is very well positioned to quickly build on its indigenous nuclear energy technology and become a world-class player in the nuclear energy market. Common concerns of global warming and climate change have finally provided an opportunity for nations to cooperate in nuclear technology for improving the global energy scenario. India must harness nuclear energy to support its economic growth aspirations till renewable mature to provide over 50% of total energy needs.

India must also be proactive in the international efforts in mitigating the effects of climate change through positive participation in the international dialogue such as the forthcoming Paris Conference to finally agree on the commitments of individual countries towards reducing carbon signatures with time-bound targets. While OPEC group may want to prolong the heavy dependence on oil by fine tuning the oil price, international combine for environmental protection must unite for a coordinated momentum for reducing the GHG emission while increasing potential for clean technologies. It is a unique opportunity for a win-win situation for global energy scene, which could easily turn in to a 'lose-lose' scenario, if mismanagement and conflicts are allowed

to overtake cooperative efforts. India must play a very proactive role for this global win-win opportunity.

4. Concerns for India's National Security Interests

The world today is getting increasingly globalised and interdependent with the very definition of 'National Security' changing from the traditional geographic security of national borders from enemy forces, - to a broader concept of comprehensive security that includes protecting all issues of national priorities starting with the basic human security, economic security, energy security and internal 'homeland' security to the security of strategic assets, missile defence and national interests in the outer space as well as in cyber space. Hence the basic safety, stability and capacity for competitive performance of the modern society have become an integral component of national security. It is this basic foundation of a secure and stable nation that can come under serious stress due to the effects of climate change. Despite a fair understanding of the long term implication of climate change, the subject has aroused more debate in the international forums than any concrete steps to mitigate the effects. Now with the realisation of the security implications of climate change, there is a growing international focus on the potential effects of climate change and urgency for collective action to limit the adverse effects. Given that poorer developing countries will be affected more severely, the subject is of great importance to India's national security.

Given India's heavy dependence on both the glacial sources of water reserves of the Himalayas and the monsoon precipitation, scarcity of water resources in the region will intensify the inter-state and intra-state disputes over territories that either have the water resources or control the flow of water to other territories. Importance of Jammu and Kashmir for India thus needs to be appreciated in this context. While only 45 percent of the original J&K state is now under Indian control, this part has the Indus and its tributaries flowing into Pakistan administered region. Baglihar dam is already a matter of Indo-Pakistan dispute and given the various intra-state water disputes within the Pakistan's Punjab-Sindth-Baluchistan regions, any scarcity of water is bound to create more passion in to existing conflicts. The Indus Water Treaty that allows India to build hydro-electric plants on the rivers flowing in to Pakistan, without affecting the downstream water flow, could easily fall

victim to any new water crisis. Climate change can thus trigger a new level of conflict between India and Pakistan. Similarly, China's plans to divert the flow of Brahmaputra river northwards to suit Chinese interest has already created tensions in India. China's continued exploitation of the Tibet region also has serious long-term implication for India's water resources in the east. Actual effects of climate change will aggravate the situation.

Large scale migration due to rise of sea level and loss of cultivable land is a more immediate concern for India as the migration of climate refugees from Bangladesh will add a new dimension to the migration that has already started due to economic reasons. Mass migration from Bangladesh that seems to be sinking deeper in to Islamic extremism and jihad fundamentalism can create serious problems for societal stability and internal security for India. One must recognise that India has its own share of water related disputes between states such as Tamil Nadu with Karnataka and Kerala, Punjab with Rajasthan and Haryana etc. Climate effects can aggravate these disputes. Coastal areas of Sundarban and other parts will face the same problems as Bangladesh causing population moving to safer lands and cities. Economic disparities and inequitable distribution of resources arouse a new level of passion when the stress levels are already high and effects of climate change in India can thus very easily lead to eruption of social unrest and anarchy beyond the control of government agencies. Such situations are ideal for rise in militancy and a serious threat to human security.

Climate change will also stress the military by affecting weapons systems and platforms, bases, military operations and defence personnel. Operating equipment in extreme environmental conditions increases maintenance requirements at considerable cost and dramatically reduces the service life of the equipment. In the future, climate change, whether hotter, drier, or wetter will add stress to weapons systems. More storms and rougher seas increase transit times, contribute to equipment fatigue and hamper flight operations. Severe weather has a direct effect on military readiness and efficiency as experienced in the Rajasthan desserts during summer months. Ships and aircraft operations are made more difficult during heavy rains or storms, military personnel themselves must evacuate or seek shelter under extreme conditions. As extreme weather events become more common, so do the threats to national

electricity supply grids and other supply lines for fuel, food and water. All these create logistic problems for military efficiency and increase vulnerabilities if under threat of war. The adverse effects of climate change during peace-time can get even more devastating during war-time and thus seriously impair the efficiency of forces in border areas and in combat situations.

5. In Conclusion

Climate change thus needs to be viewed in the context of a national security implications and not merely as a matter of social hardship or economic cost. The likely adverse changes in rainfall patterns, fresh water scarcities, increased flooding, sea level rise, spread of dieses etc, pose serious risks to social harmony and political stability in India. Problems due to vast diversity and increasing gap between the rich and poor in the country can get easily aggravated further by the climate change induced stresses. Poor infrastructure, corrupt practices and poor governance make the threat of climate change even more grave, because it is something not seen as imminent or urgent and hence does not get the attention it deserves. It is in this context that climate change must be appropriately linked to national security so that it gets the due priority in the planning process of the nation, in terms of sustainable development, energy security and national security.

The national security consequences of climate change need to be integrated into national security planning and national defence strategies. Defence forces should enhance the operational capability under challenging climate conditions by adoption of improved processes and innovative technologies that result in improved military efficiency. Defence forces should also bring new focus on energy efficiency and reduce dependence on imported oil and vulnerabilities of the logistic infrastructure. Weather forecasting techniques must be modernised to vastly improve the capacity of monitoring the patterns of climate change and also develop reliable early warning systems for extreme weather conditions for the country. Some advanced countries are known to be already working on the possibility of using weather as a weapon in the future, although for now it is only at a simulation exercise level. However, the potential of climate change as a threat to security needs to be recognised in all its dimensions and factored into national security planning.

This lack of united approach to roll back climate change raises grave international security concern as it tends to further divide the world, rather than bring all nations together to combat a common threat to humanity. The much desired concerted efforts should see developing countries as well as developed rich countries commit earnestly to GHG emission cuts and to developing renewable energy technologies. Since India and China now represent the fasted rise in GHG emission they could take proactive steps to demonstrate commitment towards slowing down global warming. They could in turn demand that industrial countries should provide funds for the transition to clean technologies in developing countries modify technology control regimes to allow cooperation in critical technologies for renewable energy and nuclear energy in the larger interest of environmental benefits.

Common objectives of slowing global warming should be framed in the context of 'fair-share' of responsibilities because climate change is going to ultimately affect every nation. The political leadership all over the world today thus have a unique challenge and opportunity to build international cooperation and harmony through concerted and coordinated efforts in mitigating the effects of climate change and in slowing down global warming to the levels compatible to the natural processes of earth's eco-system. That would be a huge contribution to international peace and stability in the long run for the planet Earth.

Dr Amitav Mallik

As the founder Director of LASTEC, Amitav Mallik spearheaded many path-breaking successes in high power laser technology to establish 'Directed Energy Weapon' capability for the country. In recognition, Amitav Mallik was awarded the Padma Shri by the President of India in March 2002 for his unique contribution to Defence R&D in India.

After initial research work at the Solid State Physics lab (SSPL), Delhi, Amitav Mallik served as Professor of Electronics & Telecommunication at the Defence Institute of Advance Technology, (DIAT) in Pune from 1975 to 1985. He then shifted to Defence Science Centre, Delhi in 1985 to initiate Indian R&D in high power laser technology.

In 1988, Prof Mallik was deputed to US as the first 'Adviser, Defence Technology' at the Embassy of India, Washington DC where he established the foundation of Indo-US cooperation in high-technology which eventually led to the Indo-US Strategic Partnership.

During 1995-1996, Amitav Mallik served as OSD to Dr Abdul Kalam, then Scientific Adviser to MOD and coordinated the SRIC (Self-Reliance Implementation Committee) of the MOD as the Member Secretary.

After superannuation, Prof Mallik was invited to serve as Member, National Security Advisory Board, (NSAB), for 3 successive years (Jan 2003 to June 2006). During 2005-06, he also served as Adviser to Chairman, Observer Research Foundation (ORF), Delhi – a well-known 'Think-Tank' on policy issues.

Prof Amitav Mallik has authored/co-authored five books and published many technical papers and strategic analysis reports. Presently Prof Mallik operates as a 'Technology Consultant and Strategic Affairs Analyst' from Pune and continues to contribute to national security issues including Defence, Space, Energy and Environment Security.

Counter Terrorism Strategies: Lessons for India

Prof Shrikant Paranjpe

Terrorism has been looked at as a sub-state application of violence or the threat to use violence with an intention to create panic in the society. It may appear to use guerrilla tactics, but it differs from guerrilla warfare and becomes asymmetric warfare in that terrorists do not hold on to territory like the guerrillas. In terms of contemporary analysis of asymmetric warfare, this kind of a conflict would be witnessed at two levels: Ethnic-separatist terrorism and post-modern pan-religious terrorism. Ethnic-separatist terrorism revolves around the concept of ethnic nationalism and the right to self-determination. Post-modern pan-religious terrorism goes beyond the limits of the geopolitical entity of a nation state system. The objectives are abstract and may be defined with reference to the religious resurgence of the post cold war era.

Academic literature on the concept of right to self determination presents several theories that seek to understand the morality of secession. 'Just Cause' theories present a strong link between the right to resist tyranny and the right to self-determination and by doing so; it grounds the right to self-determination in the framework of human rights.[1] The concept of 'self-determination' gained rationale in the latter half of the 1980s, especially in the context of the East European revolution and the changes in the Soviet Union. The radical changes that took place in East Europe saw both – a redesigning of approaches to governance and a redrawing of boundaries. The former led to the overthrow of

the Soviet influence on the political system of these countries. These countries shifted from the Soviet model of socialist governance to a western representative system of governance. The latter saw the split of Czechoslovakia, disintegration of Yugoslavia and unification of Germany. It also saw the early uprisings in the Baltic States and the eventual disintegration of the Soviet Union. Much of the rationale for the changes in East Europe and Soviet Union came from the operation of the concept of ethnic nationalism based right to self-determination.

Today, post-modern pan-religious terrorism has sought to redefine the approaches to asymmetric warfare. The approach goes beyond the framework of the traditional nation state system. The objectives are abstract and tend to be placed with reference to the religious resurgence of the post cold war era. The 'targets' are likely to be symbols of a global (western) cosmopolitan world order.

The September Eleven attacks brought this concept of post-modern terrorism into the forefront. These attacks were interpreted not as a strike against a nation state (USA) but as a strike against certain value systems that countries like the US had come to adopt. These value systems were based upon norms of representative political systems with liberal socio-economic ideologies. The terrorist groups knew no geopolitical boundaries. They carried no national identity. There is likely to be a temptation of projecting this war in the Samuel Huntington framework of Clash of Civilizations. It needs to be mentioned here that the target was not mainstream religious-civilisational resurgence in general, but the fundamentalist militant groups within the system. For even in its efforts at resurgence, the mainstream religious movements have always remained moderate. Terrorism is not a weapon of religions that have a civilisational base.

The terrorist strikes at Bali (October 2002), Istanbul (November 2003), or Madrid (March 2004) had followed the same logic an attack against the liberal values that those societies cherish. The London bombings (July 2005) further confirmed this concept of postmodern terrorism.

The British policy of multiculturalism and cross community tolerance had been interpreted as a safe haven by several extremist groups who had made London their home. Unlike the 9/11 strikes the British bombings were conducted not by 'outsiders' but by British citizens of the first or the

second generation who had been 'socialized' into militancy elsewhere. Like the 9/11 strikes, the London bombings were an attack against the democratic, secularist, liberal and pluralist system of governance that the West had sought to project. It was the London bombings that raised several questions about strategies designed to counter this new form of terrorism.

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COUNTER–TERRORISM STRATEGY

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American approach to counter terrorism post 9/11 was based on two assumptions: that there would be a violent protest/disgust about the attacks on the World Trade Centre and that the world would rally around those who stand against such terrorist tactics that attack innocent civilians. The first of these assumptions has been accepted across the world as valid. The Americans were able to gain support on the issue of humanitarian grounds. This support came from diverse sources ranging from the European countries to the Arab world. On the second, there is a hedging of positions. The support is extended 'on principle'; but there is a reluctance to commit human resources to counter terrorist networks. This reluctance was a product of an implicit realization that though the anti-terrorist posture was targeted against the Islamic Jehadi version of terrorists, the 'Islamic' dimensions of this target was likely to get highlighted in the future.

American actions in the context of Afghanistan have now demonstrated a crafting of a well-articulated strategy to fight terrorism. This strategy appears to have the following key elements:

(i)   The building up of an international front against terrorism. This front would have several layers, ranging from those that would be providing a principled support to those who would commit human and material resources to fight terrorism. This front would involve both, a political level action and an economic level action. The willingness of the G-8 and the Organization of Islamic Conference to pursue economic restraints reflects the success at this end.

(ii) Initiating a strike against the terrorist networks by use of the modern sophisticated weaponry. Ever since the Gulf war of 1991 the revolution in military technology (RMA) has been a matter of constant debate. The ability to use high precision weapons, combined with automated control systems and an almost total transparence of

the battlefield has enabled the Americans to conduct preemptive destruction of targets at the very outset of a war. The technologies of seeing, aiming and intelligence mapping of the deep battlefield have altered the traditional ways of conducting a war.

(iii)   The third element of the American strategic response emerged as the strike against Afghanistan came to be initiated. This element was an attempt to 'quarantine' the United States. The concerns about the use of biological weapons by terrorists, especially the anthrax case, have led to raising of barriers that the Americans have traditionally been unaccustomed to.

In a sense the West had, symbolically, laid out their 'battlefield'. The central element of this battlefield was the scientific and technological capability to fight a sustained battle against terrorism. On the other hand, Al Qaida as symbol of the terrorist groups in and outside of Afghanistan appeared to have evolved their own alternate strategy to counter the western doctrine. This counter strategy was based on the assumption that they do not have the technological or the military capability to counter strike the west in the 'battlefield' drawn by mainly by the Americans. Thus the counter strategy would have to be based on elements that these terrorist organizations can control and rely on. Essentially therefore, they have to evolve their own alternative 'battlefield'. This 'battlefield' would not be based on the use of weapons of war as are universally understood.

The war appears to being fought at two separate levels: one using economics, politics and the military as elements of the battlefield and the other trying to use a propaganda war of ideas and terror as its elements of the alternative battlefield. It is this feature that is most likely to complicate the counter terrorist struggle. Such a war would be a protracted and long drawn affair where the successes and losses are likely to be blurred by the fact that they would be achieved in separate battlefields. The battle of Afghanistan did not end with the defeat of the Taliban and the installation of a new government. The real war against terrorism continued beyond the events of Afghanistan.

It is this lesson that is seen in the context of the London bombings of 2005.

Britain had to face a new reality regarding terrorism in 2005. Until

recently, the 'terrorist' used to be an "outsider". He was considered to be a product of the non-western societies that had not modernized. The British experience brought home a new reality. Now it was the indigenous, perhaps a first or a second generation migrant who had not assimilated into the culture of the adoptive home. This migrant, perhaps, sought refuge in the past roots to overcome alienation and in that effort came under the influence of militant religious ideologies. The visits to their 'homeland' Pakistan by some of the London suspects indicate these linkages to militant influences.[2]

Prime Minister Tony Blair's 'advice' to the immigrant community of Great Britain that 'they share our values and our way of life' if they want to live in Britain and the warning that the rules of the game are changing is essentially a clear articulation of the revised counter terrorism strategy that it had sought to evolve in the post Afghanistan era. [3] Tony Blair's advice to Asians was likely to be interpreted in the same spirit of quarantining of the United Kingdom from unwanted multicultural indulgences that appear to influence the second generation immigrants. However, Blair appears to branch out into a very different route. He appears to have recognized that the new form of terrorism is a battle of ideas, of igniting minds of activists to fight for an 'idea'; that of Jihad. He therefore appears to have countered this form of terrorism with a strategy that sought to fight ideas with ideas, mindsets with equally powerful counter mindsets. Jihad was thus to be countered by a redefined and restated sense of British nationalism. This was to be rooted in the same liberal, plural philosophy that Britain had stood for. Yet it sought to assert certain fundamentals of Britishness that included an appreciation of its history, culture, tradition and language. Language here was not just a medium of communication but an expression of culture.[4]

INDIA

What are the implications of this to India? The linkage between the Taliban forces, Al-Qaida and variety of groups involved in cross border terrorism in Kashmir necessitates the focus on the region. Indian strategic perceptions about problems of terrorism are Pakistan centric and have an inevitable linkage with events in Kashmir. The presentation of the problem has been structured as an undeclared, low intensity conflict or proxy war that is conducted by Pakistan and is fought through various

militant groups.

A distinction needs to be made in the two levels of militancy in Kashmir. One level is that of the demands made by the Kashmiri populace within the geopolitical framework of the nation state of India. These demands may be articulated by any of the groups in Kashmir, they would constitute legitimate demands that the State needs to address. The second level of militancy is a product of an abstract ideological struggle that has come to be labeled as 'Jihad'. This level of an agitation does not recognize any geopolitical boundaries and is a global war against the system. This is as much a threat to countries like India as it would be to Pakistan. It is at this second level threat that the counter terrorist strategy needs to be addressed.

Indian strategic perceptions about problems of terrorism have, traditionally, suffered from two handicaps. One is the Pakistan centric perception about events in Kashmir and other areas; and two the articulation of the problem in an idiom that is alien to the global community. The presentation of the problem has been structured as an undeclared, low intensity conflict or proxy war that is conducted by Pakistan and is fought through various militant groups. The terminology used is that of 'communal tensions' rather than 'terrorism'. Consequently, the Americans have sought to contain the problem within the geopolitical boundaries of South Asia. The Clinton version of Kashmir being the most dangerous place in the world is a product of this containment. It denied India the global access to recognition that terrorism is a universal threat that needs to be tackled at a global level. Today the pointing of a finger at Pakistan by the British authorities as a possible link in the London bombings has given an international perspective to a problem that the West had sought to contain within the geopolitical boundaries of South Asia.

Traditionally, India has always articulated a non-military strategy for the resolution of disputes. The use of diplomacy and consideration of force as a last option have been the twin bases of Indian strategy. India is well aware of the resultant political uncertainties of a cross border military action against terrorist bases. 9/11 had provided a breakthrough in global perceptions about the use of force to tackle terrorism. Yet, while India extended full support to the Americans in their fight against terrorism there was little reciprocity on the Indian position about cross

border terrorism. The key question is not whether the US or Britain would now tilt away from Pakistan especially after the killing of Osama bin Laden in Pakistan and the growing proof of Pakistan's collusion with the terrorist networks; but whether they would acknowledge the problems in Kashmir as those that may be classified as problems of terrorism. Such a classification is crucial to the Indian counter terrorism strategy.

The traditional Indian counter terrorism strategy has been structured along several layers. In so far as terrorism is used as a tool to address demands within the framework of the nation state, it has sought the simultaneous use of the political and economic initiatives with the use of force. At the non-military level, Indian policy would tend to focus on the role of governance in the context of the civil society. Civil society is based on the recognition of difference and diversity. Civil Society is not the same thing as liberalism or democracy; modern capitalist economy is also not a guarantee for civil society. But Civil Society makes liberalism and democracy desirable.[5] The argument is in favour of developing a 'Participatory State'[6]; where segments of society excluded under more hierarchical systems are permitted greater involvement. Public policy is thus to be a product of a dialogue, consultation and negotiation.

It is here that the Indian dilemma is seen in its classic form. It is located in its ability or otherwise to use force in face of a threat to the pluralist nature of Indian society. The concept of 'unity in diversity' has sought to present this pluralist tradition of India. The question is, would the Indian State take up a position similar to the one taken by Prime Ministers Tony Blair or David Cameron and call for a cohesive action against terrorism? Great Britain had sought to build up an image of a tolerant multicultural policy that gave 'security' to several groups that had problems in their own homeland territories. Under the doctrine of State multiculturalism Britain sought to encourage different cultures to live separate lives, apart from each other and the mainstream but failed to create a vision of a society where they belonged. It was for the first time that the British were publicly stating that their citizens, local and adoptive of all creeds must accept the way of life of their adoptive home. Further, they were seeking to expel those who are likely to upset the British social order.[7]

India has sought to provide certain values like freedom of speech,

freedom of worship, democracy, rule of law, and equal rights regardless of race, sex or sexuality. This has defined Indian polity. When these values come are challenged there arises the need to confront and contain those who seek militant solutions. Such containment is necessarily a product of the use of force. It is to that end that Indian policy makers would have to address themselves. Implicit in this is the approach to the debate on Human Rights that has had a checkered history in the context of violations reported against the State authorities and those reported against the terrorist outfits. This is not to grant any State agency the right to violate human rights. It is only to indicate a realization on part of the Human Rights groups that the terrorist outfits need not be sheltered. However the questions remain, would the Indian State be critical of, condemn and take appropriate action against the segregated communities if their behavior runs counter to the Indian values?

Notes (Endnotes)

1 Margaret Moore, (ed.), *National Self Determination and Secession* (Oxford:OUP, 1998) Introduction pp. 5-6.

2 Prime Minister Tony Blair's speech on the London bombings, BBC News.: Its roots are not superficial, but deep, in the madrassas of Pakistan, in the extreme forms of Wahabi doctrine in Saudi Arabia, in the former training camps of Al-Qaeda in Afghanistan; in the cauldron of Chechnya; in parts of the politics of most countries of the Middle East and many in Asia; in the extremist minority that now in every European city preach hatred of the West and our way of life. Source: http://news.bbc.co.uk/2/hi/uk_news/4689363.stm

3 Tony Blair: 'But, coming to Britain is not a right. And even when people have come here, staying here carries with it a duty. That duty is to share and support the values that sustain the British way of life. Those that break that duty and try to incite hatred or engage in violence against our country and its people, have no place here.' *The Guardian* 5 Aug 2005. Source: http://www.theguardian.com/politics/2005/aug/05/uksecurity.terrorism1

4 Mr Blair said at a special Downing Street press conference: "If people want to come here, either fleeing persecution, or seeking a better life, they play by our rules and our way of life. If they don't, they are going to have to go because they are threatening our people and way of life. Coming to Britain is not a right. And even when people come here, staying here carries with it a duty." …He said the planned commission on multiculturalism would not threaten anyone's culture or religion. But he added: "There are people who are isolated in their own communities who have been here for 20 years

and still do not speak English. That worries me because there is separateness that may be unhealthy." *The Guardian* 6 Aug 2005 http://www.theguardian.com/politics/2005/aug/06/terrorism.july7

5 John A. Hall, 'The Nature of Civil Society' , *Society*, May-June 1998, p.33.

6 B. Guy Peters *The Future of Governing: Four Emerging Models* (Lawrence: University of Kansas Press, 1996), pp. 47-71.

7 Prime Minister David Cameron on radicalisation and Islamic extremism, Munich, 5 February 2011. Source: http://www.newstatesman.com/blogs/the-staggers/2011/02/terrorism-islam-ideology

Prof Shrikant Paranjpe

Dr. Shrikant Paranjpe is Professor in the Department of Defence and Strategic Studies, and Director, Yashwantrao Chavan National Centre of International Security and Defence Analysis (YC–NISDA), Savitribai Phule Pune University, Pune 411007, India. He was a Fulbright Fellow (Post Doctoral, Research) at the George Washington University, Washington D.C. in 1984-85 and a Visiting Professor at Colorado College, Colorado Springs. His publications include India and South Asia since 1971 (New Delhi: Radiant, 1985); US Nonproliferation Policy in Action: South Asia (New Delhi: Sterling, 1987, simultaneously published by the Oriental University Press, London and the Envoy Press, New York); A Peace Agenda for Indian Foreign Policy (New Delhi: Har Anand, 1995) (Co-author); Strategic Studies (Pune: Continental, 1995) (in Marathi); Western India: History, Society and Culture, (Editor) (Pune: ISMM, 1997). Parliament and the Making of Indian Foreign Policy: A Study of Nuclear Policy (New Delhi: Radiant, 1997); India's Internal Security: Issues and Perspectives, (Editor) (New Delhi: Kalinga, 2009); India's Strategic Culture: The Making of National Security Policy (New Delhi: Routledge, 2013); India and Sri Lanka: Future Imperfect (Co-editor) (New Delhi: G.B. Books, 2014) and India's Foreign and Security Policy: Challenges and Opportunities (Editor) (New Delhi: G.B. Publishers, 2015)

The Tiananmen Square Massacre in China and its aftermath

By Shri Shekhar Moghe

Summary: Chinese students seeking more democracy and curbs on corruptions were brutally attacked and silenced in Tiananmen Square in Beijing, China in June 1989, when many lost their lives. 26 years later, concessions made by the Chinese leadership, the growing domestic and international economic clout of China, severe steps to remove and punish corrupt officials and changed leadership has resulted in making the incident considerably less relevant.

What happened in June 1989 in Tiananmen Square, in the heart of Beijing, very clearly established the importance of people power in China, severely shaking the earlier beliefs about power such as "power grows from the barrel of a gun" as proposed by Mao Zedong in 1938 or power as a "heavenly mandate" as the Chinese emperors wanted their subjects to believe.

In that sense, it was a tsunami, created by forces as yet unknown and unseen in China, quite unlike earlier large waves indicating change of thinking for the people (and the Government), which could be suppressed and forgotten. In the study of any geological disruptions, it is important to map out the clashing tectonic plates as well as the fault lines before and after the eruptions in as much details as possible, to be able to improve predictability of future likely eruptions. Study of such tsunami of people power would also require going in to many details of

all the forces at play

Tiananmen Square (the "Square") with a vast area of about 100 acres has witnessed a number of critical developments in China over several centuries. One edge of the Square, where a Gate (named "Gate of Heavenly Peace", a massive structure by itself) separating the Square and the "Forbidden City" (traditional Imperial Palace) was the corridor connecting the Imperial World (not accessible to the common man) with rest of the world. This Gate was the starting point for most major Imperial Military Campaigns since 1417 and the announcement of establishment of People's Republic of China was made by Mao Zedong from the top of this gate,

A huge portrait of Mao has since then been hung from the Gate, as if to witness all important happenings in the Square, which is also the venue for all National Level celebrations.

During the night of 4 June 1989, about 1 million people, mostly students and workers, who had converged on, occupied and protested in the Tiananmen Square for some days, were forcibly evicted resulting in deaths of thousands of people. Till to date the Chinese Government has remained extremely reluctant to say much about the incident and there is no clear official figure about how many perished, the estimates varying from a few hundred to a few thousand. An indication of the success of the Chinese Government in suppressing the memories of "4 June 1989" is that the average Chinese in his or her twenties or thirties finds no significance in the term *liu si* — June 4 — which is how the protests and the widespread demonstrations in 1989 that ended in massive bloodshed, were referred to in China.

Understanding of the developments in the few decades before 1989 is necessary to fully appreciate this unprecedented eruption of people power and the Government response to this eruption as well as the aftermath, which the Chinese Government is so keen to wipe out from the public memory.

For several decades after the collapse of the Imperial power in China brought about by Kuomintang ("KMT") in 1911, KMT did not have undisputed control of China; a large part remaining under the control of various warlords and therefore unstable. By the time KMT could gain control of substantial part of China in 1928, the emerging Communist Party of China (or Chinese Communist Party- CCP-established in

China in 1921) was trying to grab power from the KMT and both in turn were fighting with the Japanese, who had control over large parts of China. This tug of war and internal instability continued until the end of the Second World War.

Although the CCP achieved undisputed control of China from 1949 by driving out KMT under Chiang Kai-shek to Taiwan, all the subsequent Mao-initiated campaigns like "Great Leap Forward" (including backyard production facilities for even highly sophisticated products like steel) and "Cultural Revolution" not only did not give any economic relief to the burgeoning population but managed to destabilize and antagonize many parts of the society.

Seeing the impracticality and the damaging power of these campaigns, perhaps initiated for the sole purpose of maintaining the control of Mao Zedong on the public mind, moderates under the likes of Zhou Enlai attempted to tone down the campaigns but did not succeed.

Deng Xiaoping, although supportive of Mao Zedong in the various campaigns, waxed and waned until the death of Mao Zedong. After the death of Mao Zedong in 1976, Deng Xiaoping (proponent of "market economy" in later years) succeeded albeit after some power struggle and brought about changes in the way CCP looked at the society, the economy and industrial activity.

Growth in jobs, income and prosperity and loosening of State Control, (earlier exercised through communes, collectives and work units) under Deng could not cope up with inflation and aspirations, rising even faster. Feeling of frustration and anger, especially among the students kept mounting against the ruling officialdom, when the promised reforms never appeared and the "princelings" (children of those in powerful positions in the CCP, controlling the economy at various levels) appeared grabbing wealth and opportunities.

Deng Xiaoping assisted by the Prime Minister Li Peng were seen as recalcitrant tyrants by the students and the general population, who however hoped that Hu Yaobang and Zhao Ziyang, were sufficiently powerful and pragmatic and might be able to bring about some long promised reforms.

Those who benefited from the on-going style of the Government could "successfully" blame Hu Yaobang for widespread student protests in 1987, who had to resign as Party General Secretary. His replacement,

Zhao Ziyang, continued with economic and political thinking of Hu Yaobang (which was not liked by many in power), who was increasingly marginalized although still a member of the Politburo.

Hu Yaobang developed health problems and succumbed to a heart attack on April 15, 1989. This was like a spark into the highly flammable student population, who always saw Hu Yaobang and Zhao Ziyang as their hope for reforms.

From the time of Hu's death to the morning of April 17, 1989. spontaneous mourning activities occurred on University Campuses in Beijing, Shanghai, Xian and several other cities.

While the foreign press praised Hu for his pragmatism and honesty, the Japanese Kyodo and Jiji news agencies both raised the possibility that against a background of widespread feelings against inflation and corruption and student demands for more democracy, popular mourning activities could develop into a challenge to the government, especially if the government tried to brush them off too lightly[1] as if they held some crystal ball.

Students in mourning carrying banners and wreaths, shouting slogans in favor of freedom, democracy and the rule of law kept gathering at the Universities, moving from the Universities to the Square, which also houses the Monument to the People's Heroes and generally expressing themselves in spontaneous speeches and readings of poems praising Hu Yaobang.

At dawn on April 18, 1989 several hundred students started a sit-in in front of the Great Hall of the People and demanded to be received by an adequately senior leader to respond to their seven demands[2] viz. (1) affirm as correct Hu Yaobang's views on democracy and freedom; (2) admit that the campaigns against spiritual pollution and bourgeois liberalization had been wrong; (3) publish information on the income of state leaders and their family members; (4) end the ban on privately run newspapers and permit freedom of speech; (5) increase funding for education and raise intellectuals' pay; (6) end restrictions on demonstrations in Beijing; and (7) hold democratic elections to replace government officials who made bad policy decisions. In addition, they demanded that the government-controlled media print and broadcast

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1. https://www.nytimes.com/books/first/l/liang-tiananmen.html
2. https://www.nytimes.com/books/first/l/liang-tiananmen.html

their demands and that the government respond to them publicly.

By the end of the day, the students were not satisfied since only low ranking officials met them. By then students from many campuses continued to converge on Tiananmen Square adding to the crowd, thousands in numbers was disorderly.

The same pattern – the students feeling neglected by the Government since no senior official was available to meet the students – continued.

Tens of thousands of university students gathered at the Square from the evening on Friday, 21 April 1989, a day prior to the funeral of Hu Yaobang and camped all night in the square, to foil Government plans to close off the area in the morning of the day of the funeral (and thus avoid student mass rallies). In addition, students by the thousands could be organized[3] through channels such as posters and notice boards to gather in Beijing Normal University with enough food and drink to stay the night in the Square[4] and then to march to the Square just after midnight, where caught off guard, police could do nothing but let them march into the Square. As the funeral started at 10 am on 22 April 1989, the 100,000 strong students were separated from the Great Hall of People (where the ceremony was taking place) by a thick wall of police, so that the students would be unable to rush in to the Hall. They waited to pay their respects during the customary drive of the funeral possession around the square to learn after a long wait that the hearse had skipped the Square all together and already left. That's when the anger and chaos took over.

Many of the mourners never left the Square. The sheer size of the crowd and the level of dissatisfaction it reflected seemed certain to put new pressure on the Government, although no one seemed to know whether China's leaders are more likely to react with concessions or with a crackdown.

The students gathering in the Square initially to express their mourning, were now expressing anger and frustration which was spreading to other parts of the students community in the rest of Beijing and in fact the whole of China.

Trouble was expected in several places including Shanghai, Tianjin, Nanjing, Xian and Changsha, not just in the form of student protests

3. http://www.standoffattiananmen.com/2009/04/this-day-in-1989-april-21.html
4. http://www.standoffattiananmen.com/2008/04/hu-yaobangs-funeral.html

but also from peasants unsatisfied with the system of the Government procuring grain, pork and other products for sale in urban areas but being unable to pay cash to the farmers for a long time.

Zhao Ziyang, who was sympathetic to the protesters, left for an official visit to North Korea on April 26, 1989. On the same day, perhaps reflecting the official thinking of the hardliners Deng Xiaoping and Li Peng, an editorial in the state-run People's Daily condemned the protesters alleging that the students' movement was "a planned conspiracy" only inflaming the protests now spread to most large cities. The protests clashed with a visit from the Soviet Union's Mikhail Gorbachev, the first visit from a leader of China's communist peer in 30 years. The Chinese had scheduled a state banquet in the Great Hall of the People at the edge of the Square on 15 May, which could neither be cancelled nor be shifted elsewhere and Gorbachev ended up having to go through the back door.

Since there was no attempt to placate the students or even persuade them to leave the Tiananmen Square, (perhaps because as yet there was no agreement on the best way to deal with the situation) many students had started a hunger strike on May 13 and by May 19, 1989, the crowds in Tiananmen

Square had swelled to more than a million including hunger strikers by thousands suffering from dehydration and exhaustion.

One of the printed manifestos read[5]: "The nation is in crisis -- beset by rampant inflation, illegal dealing by profiteering officials, abuses of power, corrupt bureaucrats, the flight of good people to other countries and deterioration of law and order. Compatriots, fellow countrymen who cherish morality, please hear our voices!" spelling out what the students were looking for and felt must be considered by the Government, where nobody appeared to be giving them any hearing. Their hunger strike drew further broad public support and many important intellectuals pledged their help.

Although Zhao Ziyang tried to convince Deng Xiaoping to retract Li's "April 26 article", not only were his attempts unsuccessful, it appeared that the Party wanted the PLA to be used to forcibly get the Tiananmen Square freed of the demonstrators. In the early hours of 19 May 1989, Zhao appeared in Tiananmen Square and using a bullhorn, appealed

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5. http://www.pbs.org/wgbh/pages/frontline/tankman/cron/

to the students gathered at the square advising patience and restraint. It was a vain attempt at peacemaking, since Zhao Ziyang already knew that the Martial Law was inevitable (and had therefore tendered his resignation), which was formally declared on May 20, 1989.

Upon declaration of martial law, when attempts to find a peaceful solution appeared to have failed, seven army battalions were organized to clean up Tiananmen Square.

The protests, going on for about 7 weeks, had been peaceful, and the general thinking of the students was "the soldiers won't hurt us if we are peaceful". The protesters sang The Internationale, an anthem of the socialist and leftist party as well as the Chinese Communist Party's and monitored the army units approaching the Square from the outskirts of town, seen approaching the Square beginning the evening of June 3, 1989.

Although the foreign media was taking notice of the standoff and has been transmitting the developments in the Square, nobody would imagine, what followed.

I am fortunate to be living in Hong Kong at that time and to have watched many of the critical developments, transmitted through the local television, while until the media was prohibited from live transmission on declaration of the Martial Law (smuggled video and still pictures still somehow surfacing, giving ample coverage of the incidents for the world to get a good idea of what was going on).

By the evening of June 3, 1989, there were hundreds and thousands of tanks, army personnel carriers, soldiers, students' tents and chains of students, arm in arm trying to block soldiers' advance were all over and around the Square and in general a restrained appeal from the Government for the students to leave the Square continued. After about 9 pm gunfire could be heard. Rumbling tanks, firing guns, shouting mobs battled it out in the Square and by-lanes around. Armored personnel carriers chasing students running helter-skelter, volunteers and ambulances hastily removing stricken comrades using whatever available means and police wielding batons for dispersing groups of students, who were attacking soldiers, policemen, tanks and any "enemy" with whatever they could gather – from stones to Molotov cocktails – muddied the scene. Not all the vast area of the Square was adequately lit, which, while suited both the attackers and the attacked, was not very ideal for picture

transmission, repeatedly interrupted by sounds of gun fire and exploding vehicles, until about 4 am. The entire Square then plunged in to darkness followed by the PLA troops, vehicles tanks and APCs advancing with the help of spotlights and headlamp, a disadvantage to the students who were diminishing in numbers as a result of injuries and pressure to run away and save themselves.

By 5 a.m. Tiananmen Square was virtually emptied of all protesters; only the carcasses of smoldering vehicles and debris remained. Elsewhere in the city, sporadic skirmishes continued, but by then the great, peaceful dream for democracy had become a horrible nightmare. Hospitals reported receiving dead and wounded in hundreds or even thousands. One anguished doctor reported at least 500 dead. When the government radio announced that 1,000 had died, the station's personnel were quickly removed, and no further death toll was broadcast. Reports circulated that many bodies were being trucked away to be cremated, so the real count may never be known[6].

The on-the-spot images and the subsequent reporting left some indelible pictures in international public memory.

An unknown man, carrying some shopping bags and blocking a column of tanks just by standing in front of them on 5 June 1989 became a symbol of the power of the people. This "Tank Man" was persuaded to let go and moved away, apparently unharmed and then was forever lost to the posterity.

While waiting, the protesters had constructed a "Goddess of Democracy", a 30-ft.-high, plaster-covered Styrofoam structure bearing a marked resemblance to the Statue of Liberty, which figured repeatedly in the pictures of the uprising. The Goddess of Democracy although deliberately crushed by the advancing tanks, repeatedly surfaced in some form in all subsequent protests against the Chinese Government, including those in Hong Kong (in 1989 in sympathy, when Hong Kong was still British and in 2014, when Hong Kong had already become a part of China). For various reasons including diplomatic "handling" by local authorities, protests in other cities did not escalate as much. In fact the way Jiang Zemin (the then Party Secretary for Shanghai) handled the protests in Shanghai, where the student population was as large as that in Beijing and perhaps as agitated post death of Hu Yaobang, the

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6. http://time.com/2822358/tiananmen-square-25th-anniversary/

protests were effectively not allowed to grow beyond a simmer, This improved his political position so much that he was anointed as successor to Zhao Ziyang.

According one school of thought, the Beijing massacre of June 1989 could have been avoided by timely use of police or tear gas instead of the massive show of military might. It appears that Deng Xiaoping opted for the show of force[7] establishes beyond doubt that there was no room for those who wanted to be soft. The needless brutality however forced many party members to question the viability of their organization. It was also the conclusion of a hidden drama inside China's top ranks, where an intense power struggle had paralyzed the leadership for weeks (the main reason the protest was able to grow so large in the first place)[8].

Whatever measure taken, seemed to work, and when later during 1989 several communist regimes in Europe disappeared, communism in China – despite suffering from a badly outdated ideology, endemic corruption, and a devastating loss of legitimacy after the massacre - did not.

Post 1989, any discussion, analysis or even mention of anything to do with Tiananmen Square remained a taboo. The official version of the incident and the death toll is extremely sketchy. While in 2014, the western media had a lot to say about the incident by way of 25 th anniversary of the incident, the People's Daily carried no prominent mention of what happened 25 years ago.

It will be worthwhile to see, to what extent what the protesters were demanding was achieved in the subsequent period. The demands were mostly centered on reforms in political and legal system and curbing corruption, although the students had initially made some specific demands (which nobody from the Government wanted to address, except Zhao Ziyang –when he was on the way out- as mentioned earlier).[9]

Let us first see to what extent progress has been made in curbing corruption.

Central Commission for Discipline Inspection (CCDI) the CCP's

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7. https://www.foreignaffairs.com/reviews/review-essay/1999-01-01/eye-tiger-what-jiang-zemin-tells-us-about-china

8. https://www.foreignaffairs.com/reviews/review-essay/1999-01-01/eye-tiger-what-jiang-zemin-tells-us-about-china

9. https://www.nytimes.com/books/first/l/liang-tiananmen.html

all-powerful watchdog – its monitor, investigator, accuser and executioner – of corruption, bad management and anti-party behaviour amongst its 87 million members has officially executed cases involving 68 high-level officials in 2014, and punished more than 70,000 officials for violations of the anti-graft rules.[10] Some of the onetime heroes toppled by CCDI have been Yang Weize, Zhang Kunsheng, Ling Jihua, Zhou Yongkang, Xu Caihou and Wan Qingliang cutting across various factions, regional lines and activities.

A more recent case of Bo Xilai, the former Communist Party chief in Chongqing, Mayor of Dalian, Governor of Liaoning and Minister of Commerce once seen as a high-flyer tipped for even higher offices[11], can be a good example of the seriousness of the Government for eradication of corruption. His downfall started in 2011, triggered with the death of a British Businessman followed by the ouster of the Chonqing chief of police, associated with the death. The Police Chief sought asylum in US Consulate in Chengdu, was persuaded to give himself up and then prosecuted ending up being jailed for 15 years. Bo Xilai was expelled from CCP, the parliament (so that he could be stripped of immunity to face prosecution) and was charged with "corruption, bribery and abuse of power" in July 2013[12],.Bo Xilai's wife was given a suspended death sentence for the murder of the British businessman, who had "business relations" with the family and the death was linked with "business disputes". "Bo Xilai was found guilty on all charges and sentenced to life in 2013.

While the sentencing of Bo Xilai was aimed at demonstration of the seriousness of CCP to punish all those who were corrupt there can be more than what meets the eye in this story. Bo Xilai, a recipient of patronage from former Communist Party leader Jiang Zemin, was an "elitist Princeling" that is generally known to favor a model that emphasizes free trade, economic development in the coastal regions, and export-led growth[13]. By contrast, the "populist" coalition of Hu Jintao and Wen Jiabao advocates more balanced economic development

10. http://www.abc.net.au/news/2015-01-14/chinas-tigers-downfall-timeline/6016714

11. http://en.wikipedia.org/wiki/Bo_Xilai

12. http://www.bbc.com/news/world-asia-china-17673505

13. http://en.wikipedia.org/wiki/bo_xilai

and improvements to China's social safety net. The populist faction comprised rural leaders, socialist intellectuals, and several leaders who rose to prominence through their connections with the Communist Youth League.

The issue of more democratic way of Government, essentially means, in the context of China, whether those in power are willing to share their clout and who may benefit if such sharing ever takes place (since election of those in power by public vote will be highly unlikely, as was also seen in connection with the demands made by Hong Kong students in 2014).

Xi Jinping, the current President of China, holds the three topmost positions in China, viz. General Secretary of the Communist Party of China, the President of the People's Republic of China, and the Chairman of the Central Military Commission. These all three offices are required to be China's paramount leader, and after two years in office, he has become what some have called the most powerful Chinese ruler since Mao Zedong[14]. Recent analysis of the connection between his success and his factional ties and experience in Chinese government [15]will be a good example of how power was transferred in recent past in China.

Rather than simply being associated with a 'reformist' or 'conservative' coalition, Xi is a prominent member of two factions, one based upon a shared heritage, and another based largely upon political geography. Xi's successful governorships of Fujian and Zhejiang, as well as his appeal to ordinary Chinese citizens, were key ingredients of his advancement. Xi rose to power because he attended one of China's top universities, allied himself with a powerful cross-section of interests within the CCP, and performed well as governor of two important provinces.

While he does not have to really win his position through ballot box, he must have support of many layers of powerful people and demonstrated ability to "do good to people" for getting and maintain his position (instead of as in old days the ability to have fought and won various conflicts with the "enemies" be they the KMT or the Japanese or simply undefined "enemies of the people").

It may be difficult to determine to what extent the current style of

14. http://www.forbes.com/profile/xi-jinping/
15. http://www.eastasiaforum.org/2010/06/20/xi-jinping-factionalism-merit-and-dealing-with-chinas-political-leadership/

leadership in China evolved out of the expression of views and aspirations of the public (predominantly students) during the Tiananmen Square incident (or massacre as the western media prefers to label). The current leadership has apparently realized that the masses have to be taken in to account, as can be seen in the various steps taken to ease the life of the common man since 1989, such as easier movement of people between impoverished rural areas in to urban areas with lots of job opportunities, massive infrastructure development and capital availability to attract manufacturing in to China mostly for export oriented products (to curtail domestic inflation) and continued seeking of international support to avoid the kind of reactions which followed the incident.Comparing Xi Jinping with Mao Zedong will be another way to explain the nature of changes since the times of Mao (since after Mao, no other Chinese leader has been able to occupy as many top most positions in the country with the exception of Hua Guofeng). The two would not however be comparable in power mainly as a result of change of circumstances[16.] Mao had no real challenger in the hierarchy but Xi Jinping has to contend with many likely political intrigues within the CCP (not only the Populist Faction competing for the power in the next round of changes at the top). While Mao did not have to win any wars after winning the one with the KMT such is not the case with Xi, who among other things has to ensure that there are no more Tiananmen Squares. In fact in order to continually expand the sphere of economic influence of China and therefore ensure high economic stability of China (with ever expanding market for the Chinese human resources), the present leadership has bought loads of US Government Securities (so that there is minimum likelihood of sanctions of the type imposed briefly after Tiananmen Square) and invested heavily in the USA and Europe (despite extra scrutiny of the investment proposals, China now employs over 100,000 people in USA alone) to ensure being able to maintain adequate technological sophistication.

China is also creating its economic colonies in Africa and Asia – many resource-rich Asian and African countries now depend upon Chinese buyers for repeat orders and investment and many of these buyers (mainly State Owned Enterprises of China) even own and operate such

16. http://blogs.reuters.com/great-debate/2015/04/20/why-chinas-president-xi-jinping-isnt-mao-2-0/

resources. As a further example of the political and economic savvy, China recently announced plans to invest about USD 46 billion in Pakistan[17] ostensibly for the purpose of establishing China Pakistan Economic Corridor ("CPEC") to improve infrastructure and add to power generation capacity. The net impact will however be Pakistan ending up more in the economic grip of China since only Chinese companies can bid for projects in CPEC and would provide their products and services at rates which will assure returns of 18 % on dollar terms (thus being fully protected from weakening of Pakistani Rupee).

China has never made any statements about its footprint outside of China which provides sustenance and wealth creation to the Chinese population at many levels. New Economic Colonies like Pakistan (and therefore extended economic border with India) may provide enormous clout to China and its ambitions based on Gwadar port being developed on Pakistani coast, among other things, creating "(Economic and Strategic) Great Wall of China on the western front of India, for which all expenses are paid for by Pakistan, which also keeps many thousands of Chinese jobs on-going. Sun Tzu[18] would have been chuckling!

The Communist Party of China was forced to strike a deal with the Chinese people in 1992," said[19] Wu'erkaixi, a student leader of the pro-democracy movement who fled China after the incident and has lived in exile ever since. "The Party gave them the right to make money in exchange for political cooperation -- the deal worked."

The pulsating student power causing disturbances within China seem to be nowhere in sight while the international economic might of China is growing so fast that Tiananmen Square, where the general population – now controlled somewhat less firmly and is without the same strong and daring student leaders, most having fled the country after 4 June 1989 - sought a larger share of the economic pie does not seem to be relevant.

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17. http://www.theguardian.com/world/2015/apr/20/china-to-unveil-46bn-investment-in-pakistan-during-visit-by-xi-jingping
18. Sun Tzu was a Chinese military general, strategist, and philosopher who lived in the sixth century BC. He is traditionally credited as the author of The Art of War, an extremely influential and widely used ancient Chinese book on military strategy.
19. http://edition.cnn.com/2014/06/03/world/asia/china-tiananmen-remembered-jiang/index.html?iid=article_sidebar

C. G. (SHEKHAR) MOGHE
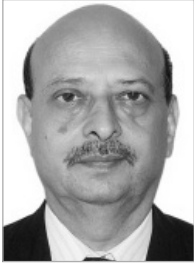
C. G. (Shekhar) Moghe has worked in financial services area in Hong Kong, Indonesia and India for over 40 years to gain close commercial and financial experience related to many Asian countries. He is of the view that recent increasing interaction between India and China calls for considerably improved understanding of both the recent history in China as well as of all time relevant classics of China such as 'Art of War' by Sun Tzu.

Shortening OODA Loop using Net Centric Warfare

Dr Ashok Kaushal

Background The wars in the contemporary information age are asymmetric and chaotic in nature. They are short, intense, transparent, precise and lethal in action. However, the 'fog of war' puzzles adversaries on both sides. It can be overcome by timely sharing and accessing data/ information in a secured and comprehensive manner from the battlespace. The information advantage of integrated and collaborated military Command & Control (C2) enhances combat effectiveness of weapons and influences the outcome of the wars.

The information remains no longer an enabler, but becomes a force multiplier for supporting the speedy decision making at operation and tactical level. Thus, the supremacy in taking action (C2) decisively based on the currency and quality of data/ information has triggered the digitization of battlespace. The 'Web' of sensors, decision makers and shooting platforms (weapons) along with robust and secured communication infrastructure has moved to net centric domain. It has curtailed the 'sensor to shooter' time, giving a distinct advantage to combat forces during execution of operations in battlespace. Information dissemination in net centric domain has undergone a paradigm shift from voice to data transmission attached with geographic coordinates of sending entity and time stamp.

Digitization of battlespace facilitates the Commanders to see their areas of responsibility in depth (temporal, spatial and thematic) and

in (near-) real time, develop an accurate Common Operation Picture (COP), share it horizontally & vertically and operate simultaneously ensuing in fatal impact on the adversary. Use of Electronics, Information and Communication Technologies (EICT) along with sophisticated Sensors and Geospatial Technologies (including GIS) has enabled timely acquisition, processing and transmission of data/ information for improving Situational Awareness (SA) among operational & command elements and necessary action during combat operations.

Challenged by the threats from adversaries on borders from east and west, the Indian Army is developing a comprehensive Net Centric Warfare (NCW) doctrine referred internally as Tactical Command, Control, Communications and Information (TACC3I) System. It comprises of Command Information Decision Support System (CIDSS), Artillery Command, Control & Communication System (ACCCS), Battlefield Surveillance System (BSS), Battlefield Management System (BMS) and Air Defence Control & Reporting System (ADC&RS). These subsystems with the exception of BMS limit themselves up to the unit HQs.

The BMS comprises of sensors and shooting platforms carried by individual soldiers and field commanders. It automates execution of tasks at lower echelons and allows soldiers to execute the plans into synchronized operations with higher echelons in fast changing battlespace.

Net Centric Operations (NCO)

The ubiquitous presence of Internet has foresighted need to collaborate and take decisions in unison. It enables communities to undertake actions by improving efficiency and effectiveness of unified and transparent operations.

The development of Internet goes back to early 1960s when US lost the war for space to Russians and USSR became the first nation to launch Sputnik. US took it seriously and conceptualized ARPA (Advanced Research Projects Agency) for collaboration among various agencies. It resulted in development of ARPANET which was subsequently rechristened as Internet.

With release of Internet for public to use in 1991, the Information Technology (IT) has undergone fundamental shift from platform

centric to net centric. Platform centricity evolved around widespread proliferation of Personnel Computers (PC)/ Workstations/ Servers in 1980s and early 1990s. The investments in R&D followed by ubiquitous high-volume and high-speed access of digital data/ information on Internet led to the emergence of Net Centric Operation (NCO).

The systems using NCO are systems connected to form 'System-of-Systems' wherein individual systems operate on their own and may have their own networks. A distinct characteristic of these systems is that the communicating elements are loosely coupled sub-systems that operate together to address a bigger multi-dimensional complex problem that cannot be solved by individual sub-systems. The systems provide a unified platform for collecting & sharing appropriate data and identifying relevance of data for the mission in hands. They facilitate informed decisions consistent with the mission in collaborative environment. They provide timely action, location independence and collaboration among entities (sensors/ decision makers/ shooting platforms). Net centricity empowers users to discover, access, integrate, correlate and fuse data/ information that support the mission.

NCO use Service Oriented Architecture (SOA) to exercise 'services' as standard means to share well-defined information with a range of systems. SOA is an open and 'plug & play' framework based on loosely-coupled suite of interoperable services (abstraction of activities) which are available and accessed remotely on the Internet. These services can be used for multiple purposes. A service executes operations such as data storage & processing, mathematical & scientific computations and networking. SOA is governed by publish-discover model in which a service is published by a service provider (responsible for hosting, executing and maintaining the service). Based on a need and subscription, a service is discovered and consumed automatically by a service user which connects and runs a set of functions remotely over Internet.

Net Centric Warfare (NCW)

While Platform Centric Warfare used computers (PC/ Workstations and Servers) on tactical vehicles to collect data manually by subject-matter experts for off-line processing and creation of reports, it had limited use and real-time feedback as individual computers operated in silos and there was no provision for data communication among

computers. The 'Digital Battlespace' necessitated development of new techniques and doctrines for rapid data collection of size 'orders of magnitude', cataloguing and processing. It asked for NCO where individual systems (sub-systems) consist of multiple inter-connected reconfigurable systems to cater to various missions. For agile response, these systems shall respond to dynamically changing missions in lieu of custom-built for optimum efficiency. They shall be configured using existing systems remotely and fielded in minimum time. The existing systems may be running on different platforms and may be owned and managed by different organizations.

Net Centric Warfare (NCW) using NCO rely on recent advances in Electronics, Information and Communication Technologies (EICT) and Geospatial Technologies (GT) to present a shared understanding of digital battlespace among geographically-dispersed forces. Using a secured communication network over Internet, NCW integrates sensors, decision makers and shooting platforms (weapons) to provide a COP and SA to the Commanders. The shared awareness increases synergy for C2, ensuing in superior decision-making and the ability to coordinate complex military operations in (near-) real-time throughout the chain of command to achieve an advantage over an adversary.

Following conclusion of Cold war and experience learnt during Gulf war, US started working on equipping its soldiers with advances in EICT and GT during late 1990s. NCW was deployed in limited manner during operations in Afghanistan and Iraq.

Basic tenets of NCW are:

- Use technological advantages to support war fighters - anytime & anywhere - in the battlespace and increase mission effectiveness with minimal casualties at minimal cost
- Network all systems and improve information sharing (i.e. where the enemy is, where you are & where your buddies are) and collaboration among armed forces
- Enhance quality of information amongst all echelons of the armed forces, reduce uncertainty ('fog of war') in battlespace and get ahead of the enemy OODA (Observe- Orient-Decide-Act) loop
- Enable self-synchronization for junior commanders and individual soldiers at the tactical level to operate independently and autonomously

with better understanding of higher command's intent based on quality of shared SA and collective knowledge of forces.

NCW uses technologies (EICT & GT) to focus on flow of data/ information and interaction between different battlespace entities. It demands significant changes in organizations in order to exploit the combat potential of armed forces at all levels of warfare and maximize the advantage in battlespace. Delivery of quality data/ information, in turn, depends on the interoperability of systems used by armed forces. NCW involves collaboration and data/ information sharing to ensure that the assets can be brought to face the adversary at the right time and at the right place during combat operations by Commanders.

NCW influences military actions at all levels, from the tactical to the strategic. It gives Commanders desired transparency to act precisely with high survivability on own side and lethality on the adversary during combat operations. Information superiority translates in fast response, concentration of force and economy of effort at strategic levels. It allows use of combat power with precise targeting, enhanced control, minimum collateral damage and better interoperability. It facilitates joint operations at the lowest echelons with increased transparency and participation. The Commanders guide the forces in forward areas as they have full picture of battlespace in (near-) real time. They avoid surprises due to increased SA.

The real-time 'sensor-to-shooter' link within NCW also allows soldiers to do a quick SA and take 'on-the-spot' decision than await decisions from respective HQ. It allows soldiers to keep track of each other when they are not directly in 'line of sight' of each others. It reduces fratricide which occurs commonly in dynamically changing war scenario. Armed forces can operate in small size independent units, travel light and spread out. It allows reducing the footprint on the ground. Combat units do not have to slow down for lagging assets. With fewer shooting platforms and supplies, they can deliver decisive impact on the adversary. They know each other's location. If a unit is in trouble, the units in close proximity can surround and attack the adversary from other directions. The local Commanders can involve experts (located at HQ) in decision making by exchanging digital (chat) messages.

NCW also enhances the reach of sensors and Intelligence-Surveillance-Reconnaissance (ISR) capability of war machinery.

Enabling Technologies for NCW

Within NCW, the military resources/ entities are regarded as nodes. These nodes exchange data consisting of voice, messages, images, video and C2 - to and from HQ. The consumers (irrespective of reach in the army establishment) within the network 'pull' the data/ information (subject to authorization and authentication) they need and 'push' data/ information to decision makers high in the command.

Digitization of communications (including voice) into digital data plays a key differentiator in transformation of armed forces. Digital technology makes efficient use of spectrum bandwidth available with armed forces for communications than its predecessor analog technology (voice communications).

NCW enables rapid communications irrespective of size among nodes and sharing of data/ information among mobile platforms and sensors. The net centric architecture heals itself if one or more nodes get affected (withdraws) during the operations.

Satellites are vital to enable communications in remote and forward locations. Wi-Fi is the killer technology for wire-less mobile communication in limited battlespace. High resolution earth observation sensors/ cameras on satellites provide synoptic picture of battlespace (GEOINT) on build-up by the adversary prior to war and destruction caused by the combat operations during the war. Satellite based navigation (GPS/ GLONASS/ IRNSS) helps to identify location of own forces and shooting platforms and target locations of adversary for firing weapons. Satellites also provide significant weather information for forward movement in challenging terrains.

Unmanned Aerial Vehicles (UAV)/ Unmanned Aerial Sensors (UAS) is one of the disruptive technologies of recent times. Among many other applications, it is used for ISR besides precise and lethal attack on the adversary.

Customized user-friendly and low weight Geographical Information System (GIS) integrated with GPS and secured communication link provides an interface for positioning various entities in the background of map and conduct 'what if' scenario for making decisions in the fast changing battlespace. It is of crucial importance for decision making in the field.

GIS is used at:

- Tactical level to
- Navigate in unfamiliar terrain
- Avoid friendly fire during operations
- Deploy troops from a location to another
- Locate adversary's units by knowing firing patterns
- Operational level to
- Define Going Maps for troop movement
- Simulate enemy terrain for training in flight simulator
- Strategic level to
- Define vital adversary's installation for effective attack during operations.

Unlike in traditional computing, Cloud Computing provides a paradigm shift for provisioning IT resources and optimally using infrastructure. It lowers CapEx and extends dynamic resource allocation to meet challenging demands during collection and sharing of data for collaboration and decision making using Internet. It allows users to explore maps and satellite images, find places and get directions using standard Web browser.

Crowdsourcing using Cloud Computing is a new paradigm to use the power of "crowds" to facilitate large tasks that involve data collection and information extraction and are costly or time consuming with traditional methods. It is an online distributed problem-solving model on Internet.

App' is a self-contained program to perform a specific task. Mobile apps are compact, intuitive and easily distributed. Usage is inclusive on mobile devices.

SOA enables armed forces to develop systems using standard services distributed over networked infrastructure. It decouples, isolates and detaches the software from the core hardware. The hardware and software are no more tightly coupled and housed in a single block. Only hardware constitute the actual equipment and the software consist of looselycoupled distributed services which are executed remotely.

SOA in NCW has the following advantages:

- New services, providing a set of new functions, can be easily integrated with the existing system. They don't need physical access to systems/ sub-systems deployed in forward locations. They can be deployed at runtime with no or minimal interruption.

- Services on existing system can be reconfigured and scaled up & down at minimum cost. The changes to the existing services on the systems/ sub-systems are made easily by changing the description on the Server side, located away from the battlespace.

- Since services are deployed on the Server side (located away from the battlespace), it is easy to diagnose the system, isolate the defects and troubleshoot. It is easy to review unforeseen scenario and handle without affecting the system in operation or moving it back to safe location away from the battlespace.

- The services can be reused to develop new sophisticated military systems using existing field-proven components. It reduces design, development and deployment time for new upgraded systems.

- The software and data components can be distributed over multiple computers/ subsystems. It enables developing powerful system using inexpensive computing machines.

- The architecture allows services to be replicated across and migrated among servers. It ensures continuous operation of the systems (including healing itself during breaking of either of its links) irrespective of physical and cyber attacks including communication blackouts in battlespace.

- The system provides a platform over which hardware can interoperate with heterogeneous services, built using different standards, programming languages and technologies.

The successful implementation of NCW depends on development of an ecosystem encompassing interoperability of inter-dependent communications devices, data and software components/ environments to enable networking of sensors, decision makers and platforms. Interoperability impacts development of products, systems, processes, procedures, organizations and missions by enhancing usage, productivity and innovativeness over the complete life cycle. For last two decades, Open Geospatial Consortium (OGC) has contributed in development

of open standards through a formal consensus process across 400+ member organizations. The open standards enable sharing of geospatial data (in native format across varied components/ devices/ platforms on Internet) using interoperability and integration of geospatial services into IT infrastructure and solutions.

In addition to above, NCW depends on many other technologies including:

- Light-weight and Low-power Hardware (Computer display & Devices)
- Pervasive and IP Defined Sensors (Internet of Things)
- Messenger (Outlook, Chat, Social Media)
- Software Defined Radio (Scalable)

BATTLEFIELD MANAGEMENT SYSTEM (BMS)

In a digital battlespace, the Battlefield Management System (BMS) integrates combat units into NCW. Using BMS, the command systems know precise geographic location of each entity with which Commanders can exchange reports, (voice/ chat) messages, satellite images/ photo and video clips.

The BMS comprises of Communication system, Application server, Database server, GIS server and Portable computer embedded with GPS and communication link. It aids entities (sensors, soldiers/ decision makers, shooting platforms) and Commanders in performing tasks by graphically displaying objects (using military and topographic symbols in the background of a map) the available C2 information associated with own troops, adversary and terrain features including overlays depicting various options for action plan against a hostile adversary. Using BMS, Commanders translate decisions into actions by synchronizing armed forces in time, space and purpose, to achieve the mission in hands.

Portable computer is a wearable/hand held system (with a touch screen) with individual soldiers and unit Commanders along with an option for vehicle mounted system. It is connected to a GPS receiver (satellite navigation system) to acquire, display and disseminate the current location of individual entities. It uses digital communication network to share/ exchange data/ information among soldiers, local Commanders and HQ.

The BMS has a reliable, robust and efficient communication

system with high bandwidth, selfconfiguring/ healing network and interoperability. The focus is on change of topology, nonline of sight communications, spectrum management, network management, security, storage capacity, authentication and robustness. The communications optimally utilize the bandwidth for communications involving voice, messages, images and video clips.

The BMS is an automated, mobile & tactical C2 system at the level of unit HQ and below. It overcomes the uncertainty in SA at forward locations. It provides (near-) real time SA to unit commanders and below, down to individual soldiers to optimize the resources within the Tactical Battle Area (TBA). It provides COP/ SA using collaboration among entities and secure, robust and reliable communication system supporting voice/ chat messages, data, images and video. The emphasis in BMS is to shorten OODA loop for the soldiers in battlespace.

The BMS generates COP by integrating all entities within the TBA on a common geo-reference frame work using GIS and provides Blue Force Tracking (BFT) using satellite navigation system GPS. Tactical commanders make informed decisions using COP in a dynamically changing battlefield. BFT shows the location of friendly troops & of adversary on a map in the background of terrain information and allows exchange of messages among own buddies.

The BMS integrates and shares inputs from a range of ground sensors with combat units including seismic sensors (SS), battlefield surveillance radars (BFSR), long range optical sensors (LoROS), thermal imaging (TI) devices and other resources available at the battalion/ regiment level. It provides intelligence, terrain and logistics information to provide a COP to commanders at various levels. It receives and transmits messages and images from sources above the regiment/ battalion level. It shares local Commanders with information received from the BSS.

The Indian BMS distinguishes itself from other systems by limiting it in sharing SA at the operational level to the soldier on the ground up to the battalion/ regiment Commander. It does a set of functions at a battalion level and below upto an individual soldier & combat platform. It allows the Commanders to enhance his SA and command his unit using a secured encrypted communication network. It will link combat soldier on forward line with systems like BSS, CIDSS, ACCCS,

AD C&R, Electronic Warfare (EW) and others. It will align with the Futuristic Infantry Soldier As a System (F-INSAS) program to equip Infantry with state-of-theart equipment.

CURRENT STATUS IN INDIA

A robust mobile communication grid, which can be moved anywhere during the war, provides a backbone network to connect and generate desired synergistic effect in digital battlespace. A Tactical Communication System (TCS) is being designed and developed for an army corps to share ISR and COP among the war-fighters in a dynamically changing and highly geographically mobile scenario. A quick and decisive action demands mobile units (spread over a large geographical area) to communicate over reconfigurable, ruggedized and highly secured network and transfer large volumes (including video streaming) of data.

The Indian Army is pursuing development of TCS as India's first 'Make' project under the Defence Procurement Policy (DPP). Two Development Agencies (DA), consisting of Bharat Electronics Limited (BEL) at one end and a consortium comprising of L&T, Tata Power (SED) and HCL Infosys at other end, have been selected by Ministry of Defence (MOD).

TCS will use state of the art technologies in military communication. Important requirements are: ESM & ECM resistance, integrated voice & data to the user, interoperability, flexible deployment, survivability and mobility. TCS will be a robust, snoop-proof and mobile network allowing integrated communication from battlefield to command HQs.

The BMS is also being designed and developed as a 'Make' project. Indian Army has awarded two consortiums consisting of BEL with Rolta India Ltd at one end and Tata Powers with L&T at the other end as Development Agencies (DA) to develop 'test beds' for BMS. These BMS will be for armoured units, mechanized infantry units, infantry units in mountains and infantry units in jungle terrain.

The complete configuration of proposed TCS and BMS, once implemented, will enable a divisional or corps commander to talk directly to and receive messages, images and video from a soldier in the trenches or a tank on the front.

CHALLENGES

It is important that data/ information in NCW are protected from network break-downs and security concerns. Critical capabilities and data must be available through the cycle of operations. Make sure that quality data/ information are accessible when and where needed to hasten decision making.

NCW shall serve varied data types including text (chat/ reports), images (photo/ satellite images) and video streaming. Currency and accuracy of data (including meta-data) are essential ingredients of success of NCW. Gaps in time-critical data affect the decision making.

The communication network must include desired security encryption techniques to protect data/ information from access of hackers/ unauthorized people. It shall allow the armed forces to use it efficiently and effectively without disruptions at battlespace. Metadata may be associated with data to discover access by unexpected users during operations in the battlespace.

The technology plays an important role in improving the SA, however, the success of NCW lies with decision makers. The human factor, quality training and ease-of use are essential for collaboration in (near-) real-time to share SA in order to fight effectively.

It is important that the system is independent of any blackout due to satellite based navigation (GPS). Accordingly, redundancy has been incorporated in Indian BMS by including support for GLONASS and IRNSS (Indian Region Navigations Satellite System).

Support using satellite communication and satellite based earth observation sensors (EOS) is vital. It has been incorporated by including support from a series of Indian satellites (IRS, RISAT) orbiting around the earth and having permanent foot-print over India and its neighborhood.

CIVILIAN APPLICATIONS

While NCW is conceptualized for armed forces in digital battlespace, relevance of NCO for management in enterprise operations has been established. An entity that can process observing and reacting to unfolding events in collaboration mode rapidly, takes advantage over the adversary in enterprise operations.

During natural and man-made disasters, the relief forces can make

use of NCO to minimize the impact of a disaster, enhance the quality of collaborated rescue operations and reduce the casualties.

During peace, the NCO can be used to dissuade a potential adversary from taking a threatening course of action. The expertise can be extended while managing with insurgency and terrorist acts.

Other applications of net-centricity include improvement of quality of life in Smart Cities (eGovernance), Disease surveillance under healthcare, Air traffic care etc.

Conclusions

Success of information age wars lies in net-centricity and curtailing the OODA loop using NCW.

Focus of NCW is for sharing time-critical data/ information in (near-) real time geographically spread areas, synchronizing operations, automating digital battlespace and generating combat power from effective networking of war fighters. NCW shares SA when and where it is needed for timely action. BMS is 'a force multiplier' that extends a combat edge to a war-fighting machinery using state of the art, mobile, robust and secured communication grid TCS for tactical operations.

NCW extends services using SOA over distributed mobile communication network - TCS.

The experience from NCW can be replicated in Enterprise Business Operations, Disaster Management, Law & Order and EGovernance.

The lessons learnt from delivery of TCS and BMS indigenously ('Make' project) have potential in implementation of national programs including Digital India, Smart Cities and Make in India.

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DR. ASHOK KAUSHAL

With qualification in development of A3 (Algorithms, Architectures & Applications) and 25+ years of experience in software development, Dr Ashok Kaushal is an Industry Leader in Information (IT) and Geospatial Technologies (GT).

- He is known for synergizing Geospatial Technologies with High Performance Computing, Grid Computing, Service Oriented Architecture, Cloud Computing and Big Data & Analytics.
- At C-DAC, ASL Advanced Systems, PCI Geomatics (Canada) and Rolta India, he had contributed in positioning Geospatial Technologies in Defence (Command & Control and Intelligence-Surveillance-Reconnaissance), Disaster Management, eGovernance and Asset Management into new territories.
- Dr Kaushal was Founder Member of C-DAC for Design, Development and Deployment of PARAM - India's first supercomputer in 1991 with applications in Remote sensing, Medical imaging and Numerical weather prediction. He was selected by ACC, Government of India to Head C-DAC, Mohali as ED in 2005
- A Tech-savvy and successful Manager, he implemented projects funded by World Bank, UNDP, Canadian Industrial Development Agency (CIDA) and Government of India (Ministry of Defence, Ministry of Agriculture, Ministry of Rural Development and Ministry of Communication & IT) as Consultant/ Director.
- He is an advocate of Processes and Industry's best practices (ISO, CMM & OGC).
- He is proponent of use of Geo-Intelligence for Human Advancement & Sustainable Development.

Sagar Parikrama

Captain Milind Paranjpe

A few thousand mountaineers have so far climbed the Mount Everest. But only 174 have circumnavigated the globe solo in a sailboat! Among them not a single has been an Indian. Retired Vice Admiral Manohar Awati has rightly pointed out in his foreword that It is no wonder in a society which forbid ocean crossing as a religious taboo over centuries, that a fear of the sea should develop in its psyche. That is why he conceived the idea of doing exactly that. But none of Indian billionaires would sponsor his idea. Finally, Indian Navy agreed to support what he called 'Sagar Parikrama'.

This book is the riveting story written by the very person, who volunteered to attempt that intrepid objective. Commander Dilip Donde, totally inexperienced in sailing, took hands on training on Sir Robin Knox-Johnston's 'open 60' boat at Portsmouth, before Sir Robin sailed solo for 'Velux 5' ocean race. Sir Robin has circumnavigated the globe twice in a sailboat. He recommended to buy a proven yacht second hand as it would save money, time and efforts. But Indian boat building yards would learn nothing from it. Admiral Awati, therefore, selected Mr Ratnakar Dandekar's yard in Goa to contract to build

THE FIRST INDIAN
Story of the First Indian Solo Circumnavigation under Sail

Dilip Donde
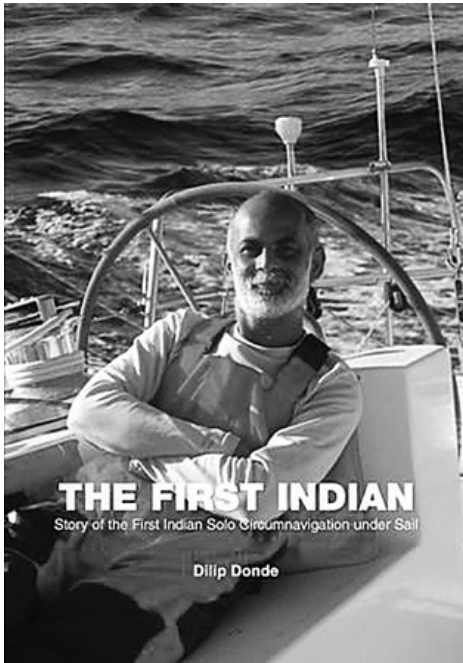
a '56 foot tonga' design wood core fibreglass boat in a year. The blueprint for it, however, was bought from a well known Dutch firm as there are no yacht designers in India.

Bureaucratic episodes in the Ministry of Defence at Delhi that the author had to face make a hilarious reading. One is surprised at the complete ignorance of geography of the babus asking him questions on his mobile phone and taking 'final decisions' there. Donde tried to derive maximum experience of sailing. He brought the Navy's 34 foot sailing vessel 'Sameer' from Kochi to Mumbai and back again to Kochi alone. That dilapidated boat taught him that 'as long as you can put up some sails and have some means of steering, you can sail'.

During construction, wood brought from Kerala forest was found to have high moisture content than declared. Dandekar could have kept quiet but after an year or so, wood have warped and boat would have started leaking when she was somewhere in the Southern Ocean. After searching for various options in vain, Dandekar finally dries the wood in the wood seasoning kiln which he set up in his own yard. Author praises Dandekar's honesty. The boat designer from Holland visited Goa thrice at Donde's insistence to inspect the construction and make suggestions. Donde calls him 'our boat building guru'. The ready boat was named Mhadei after the river on the bank of which the building yard was situated. During trials luffs of sails were found to be a bit long and had to be shortened. Donde sails along with Lt Commander Abhilash Tomy to Colombo to get them shortened to correct size. On return voyage Abhilash dozed off and Mhadei was

nearly run over by a super tanker. To get more practice in sailing, Donde and Tomy sail to Mauritius, Donde returning solo.

In order to be qualified for being in the list of solo circumnavigators under sail, a boat must sail round three capes i.e. Leeuwin in Western Australia, Horn the southernmost point of south America and the Good Hope, besides crossing the equator twice. Engine can be used only for berthing and unberthing.

Mhadei sails out of Mumbai on the 19th August 2009 for Fremantle, Western Australia. After entering trade winds, which were directly opposite to the direction of his destination, he had to sail south-westward till crossing the 25th parallel, then turn towards Fremantle. Stay at Fremantle was used to repair and refurbish various things. Abhilash Tomy arrived 7 days later, thanks to bureaucratic delay in Delhi. Donde was often asked how come, in a nation of a billion people, you are the first one to sail round the world ? He had no answer. Within 24 hours of sailing from Fremantle the Southern Ocean showed what is nature's raw power. His genoa sail was torn, a front advanced from west to east with 55-60 knot winds and 9m swell. Mhadei used to become almost vertical heading skyward, next minute, bows pointing downward towards ocean bed.The shortest passage of the voyage, turned out to be the most dangerous.

Destination 2 was Lyttelton in New Zealand where both Dandekar and Tomy came over to assist. India born master mariner agent there was a great help. Donde was touched when an Indian cargo ship in port dipped her flag to Mhadei. Local Sikhs invited him for lungar and at departure roared "Bole so nihal sat sri akal". He has called Lyttelton a little town with a large heart. Passage to Falklands was the longest and lonely. Only company was the 16 year old Australian girl Jessica Watson, also a solo circumnavigator, 1200 miles away. 17 days after sailing and 15 days before reaching the Horn, both auto-pilots failed. He managed with wind vane which turned out to be a lifesaver. It was fitted as per advice by Nigel Rowe a veteran sailor. It is a wonderful equipment that keeps heading at the desired angle to the direction of wind without using electricity. On the 12th January at 0740, with full gale blowing, Mhadei rounded the Cape Horn, accomplishing what is referred to as the 'Everest of Ocean Sailing'. 3 days later he reaches Port Stanley in the middle of the night. Even in

the very rough weather a boat came out to lead the way for him.

Auto-pilots and generator could not be repaired at Falklands. He hopped across the Atlantic but 6 days before reaching Cape Town even the wind vane became erratic. He calls Cape Town the most yacht friendly port because of availability of best quality spares and skills there. 9 days after sailing from Cape Town the rudder stock slipped down from its position and was well on its way to getting dislodged from its top bearing. He stopped the boat, rigged up a tackle from the boom and pulled the rudder stock up to its correct position. In Indian ocean the Navy sent an escort owing to threat of piracy. Here Genoa sail tore second time. Therefore, slower progress was made without the larger head-sail. At 0030 on 19 May Mhadei reenters Mumbai to welcome by family, friends and admirals in full uniform! On 22 may Vice President Ansari welcomed him. Donde had become the 175th member of solo circumnavigators' club. Success of the whole adventure was further confirmed when next year Abhilash Tomy also circumnavigated the globe solo in the same boat, this time non-stop! Well illustrated, this is a sea-book which should long ride the waves.

"The First Indian - Story of the First Indian Circumnavigation Under Sail" by Commander Dilip Donde
Maritime History Society, 237 pages, Rs 499/-

Milind R. Paranjpe

He is joined 'Dufferin' in 1961 and obtained Master's certificate in 1971. Besides having 8 years of command experience, he is a Fellow of the Institute of Chartered Shipbrokers and an Associate of the Chartered Institute of Arbitrators, London. He was Vice President in Killick Nixon Ltd and later in Five Stars Shipping. He is the author of 'Ramblings of Sea Life' a book of his own experiences at sea.

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